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Eleventh Annual Report

<i>Illinois State</i>	1
<i>Bee-Keepers'</i>	9
<i>Association,</i>	1
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ELEVENTH ANNUAL REPORT

—OF THE—

ILLINOIS

State Bee-Keepers' Association



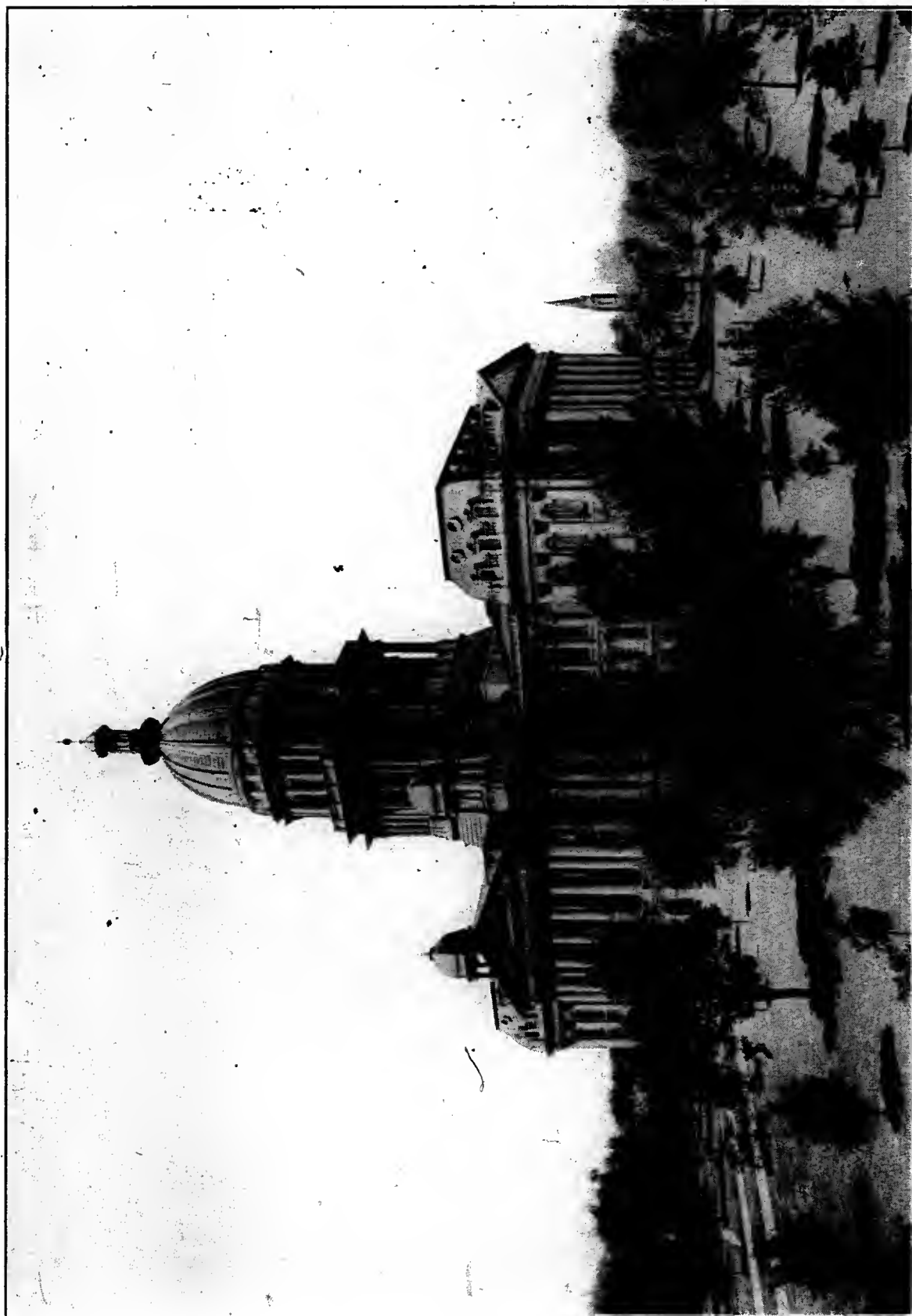
Organized February 26, 1891, at
Springfield, Illinois



COMPILED BY
JAMES A. STONE, SECRETARY,
R. R. 4, Springfield, Ill.



SPRINGFIELD, ILL.:
Illinois State Register Print.
1912



ILLINOIS STATE CAPITOL BUILDING AT SPRINGFIELD,
BEE-KEEPERS' MEETING PLACE.

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Letter of Transmittal.

OFFICE OF THE SECRETARY,
R. R. 4, SPRINGFIELD, ILL., Feb. 1, 1912.

*To his Excellency Charles S. Deneen, Governor of the State
of Illinois:*

SIR: I have the honor to transmit herewith the Eleventh
Annual Report of the Illinois State Bee-Keepers' Association.

Respectfully submitted,

JAMES A. STONE, *Secretary.*

414431



FATHER LANGSTROTH,
Inventor of the Movable Frame Hive.

OFFICERS

—OF THE—

Illinois State Bee-Keepers' Association FOR 1912

C. P. DADANT,	President
Hamilton, Ill.	

A. L. KILDOW,	Putnam
State Foul Bood Inspector.	

VICE-PRESIDENTS.

1st—E. J. BAXTER,	Nauvoo
-------------------	--------

2d—I. E. PYLES,	Putnam
-----------------	--------

3d—W. B. MOORE,	Altona
-----------------	--------

4th—LOUIS WERNER,	Edwardsville
-------------------	--------------

5th—AARON COPPIN,	Wenona
-------------------	--------

JAMES A STONE,	Secretary
----------------	-----------

CHAS. BECKER,	Treasurer
Pleasant Plains.	

List of members will appear in back of Report. Also Statistical Report.

Formation of the Illinois State Bee-Keepers' Association.

Springfield, Ill., Feb. 26, 1891.

The Capitol Bee-Keepers' Association was called to order by President P. J. England.

Previous notice having been given that an effort would be made to form a State Association, and there being present bee-keepers from different parts of the State, by motion, a recess was taken in order to form such an Association.

P. J. England was chosen temporary chairman and C. E. Yocum temporary secretary. On motion, the Chair appointed Thos. G. Newman, C. P. Dadant and Hon. J. M. Hambaugh a committee on constitution.

Col. Chas. F. Mills addressed the meeting on the needs of a State Association, and stated that it was his opinion that the bee-keepers should have a liberal appropriation for a State Apiarian Exhibit at the World's Columbian Exposition.

A motion to adjourn till 1:30 p. m. prevailed.

AFTERNOON SESSION.

The Committee on Constitution reported a form for same, which, on motion, was read by the Secretary, by sections serially.

Geo. F. Robbins moved to substitute the word "shall" for "may" in the last clause of Section 1, Article III. This led to a very animated discussion, and the motion was lost.

J. A. Stone moved to amend the above-named section by striking out the word "ladies" and all that followed of the same section, which motion led to further discussion, and motion finally prevailed.

Section 2, Article II., relating to a quorum, was, on motion, entirely stricken out.

Mr. Robbins moved to amend Article V. by adding the words "Thirty days' notice having been given to each member." Prevailed.

Thos. G. Newman moved to adopt the Constitution, so amended, as a whole. Which motion prevailed.

See Constitution.

J. A. Stone moved that the Chair appoint a nominating committee of three on permanent organization. Prevailed.

Chair appointed as such committee, Col. Chas. F. Mills, Hon. J. M. Hambaugh, and C. P. Dadant.

Committee retired and in a few minutes returned, submitting the following named persons as candidates for their respective offices:

For President—P. J. England, Fancy Prairie.

For Vice Presidents—Mrs. L. Harrison, Peoria; C. P. Dadant, Hamilton; W. T. F. Petty, Pittsfield; Hon. J. M. Hambaugh, Spring; Dr. C. C. Miller, Marengo.

Secretary—Jas. A. Stone, Bradfordton.

Treasurer—A. N. Draper, Upper Alton.

Mr. Black moved the adoption of the report of the committee on nominations. The motion prevailed, and the officers as named by the committee were declared elected for the ensuing year.

Hon. J. M. Hambaugh moved that Mr. Thos. G. Newman, editor American Bee Journal, of Chicago, be made the first honorary member of the Association. Prevailed.

At this point Col. Chas. F. Mills said: "Mr. Chairman, I want to be the first one to pay my dollar for membership," at the same time suiting his action to his words, and others followed his example, as follows:

CHARTER MEMBERS.

Col. Chas. F. Mills, Springfield.
Hon. J. M. Hambaugh, Spring.
Hon. J. S. Lyman, Farmingdale.
C. P. Dadant, Hamilton.
Chas. Dadant, Hamilton.
A. N. Draper, Upper Alton.
S. N. Black, Clayton.
Aaron Coppin, Wenona.
Geo. F. Robbins, Mechanicsburg.
J. W. Yocum, Williamsville.
Thos. S. Wallace, Clayton.
A. J. England, Fancy Prairie.
P. J. England, Fancy Prairie.
C. E. Yocom, Sherman.
Jas. A. Stone, Bradfordton.

FIRST HONORARY MEMBER.

Thos. G. Newman, editor American Bee Journal, Chicago.

State of Illinois—Department of State

ISAAC N. PEARSON, Secretary of State.

To all to whom these Presents shall come—GREETING:

Whereas, A certificate duly signed and acknowledged having been filed in the office of the Secretary of State on the 27th day of February, A. D. 1891, for the organization of the Illinois State Bee-keepers' Association, under and in accordance with the provisions of "An Act Concerning Corporations," approved April 18, 1872, and in force July 1, 1872, and all acts amendatory thereof, a copy of which certificate is hereunto attached.

Now, Therefore, I, Isaac N. Pearson, Secretary of State, of the State of Illinois, by virtue of the powers and duties vested in me by law, do hereby certify that the said, The Illinois State Bee-Keepers' Association, is a legally organized corporation under the laws of the State.

In Testimony Whereof, I hereunto set my hand and cause to be affixed the great seal of State.

Done at the City of Springfield, this 27th day of February, in the [Seal] year of our Lord one thousand eight hundred and ninety one, and the Independence of the United States the one hundred and fifteenth.

I. N. PEARSON,
Secretary of State.

STATE OF ILLINOIS, } ss.
County of Sangamon.

To Isaac N. Pearson, Secretary of State:

We, the undersigned, Perry J. England, Jas. A. Stone and Albert N. Draper, citizens of the United States, propose to form a corporation under an act of the General Assembly of the State of Illinois, entitled "An Act Concerning Corporations," approved April

18, 1872, and all acts amendatory thereof; and for the purposes of such organizations, we hereby state as follows, to-wit:

1. The name of such corporation is, The Illinois State Bee-Keepers' Association.

2. The object for which it is formed is, to promote the general interests of the pursuit of bee-culture.

3. The management of the afore-said Association shall be vested in a board of three Directors, who are to be elected annually.

4. The following persons are hereby selected as the Directors, to control and manage said corporation for the first year of its corporate existence, viz.: Perry J. England, Jas. A. Stone, and Albert N. Draper.

5. The location is in Springfield, in the County of Sangamon, State of Illinois. [Signed,]

Perry J. England,
Jas. A. Stone,
Albert N. Draper.

STATE OF ILLINOIS, } ss.
Sangamon County.

I, S. Mendenhall, a notary public in and for the County and State afore-said, do hereby certify that on this 26th day of February, A. D. 1891, personally appeared before me, Perry J. England, James A. Stone and Albert N. Draper, to me personally known to be the same persons who executed the foregoing certificate, and severally acknowledged that they had executed the same for the purposes therein set forth.

In witness whereof, I have hereunto set my hand and seal the day and year above written.

S. Mendenhall,
Notary Public.

[Seal]

CONSTITUTION AND BY-LAWS

— OF THE —

Illinois State Bee-Keepers Association

CONSTITUTION

Adopted Feb. 26, 1891.

ARTICLE I.—Name.

This organization shall be known as The Illinois State Bee-Keepers' Association, and its principal place of business shall be at Springfield, Ill.

ARTICLE II.—Object.

Its object shall be to promote the general interests of the pursuit of bee-culture.

ARTICLE III.—Membership.

Section 1. Any person interested in Apiculture may become a member upon the payment to the Secretary of an annual fee of one dollar (\$1.00). (Amendment adopted at annual meeting, November, 1905): And any affiliating Association, as a body, may become members on the payment of an aggregate fee of fifty cents (50c) per member, as amended Nov., 1910.

Sec. 2. Any persons may become hon-

orary members by receiving a majority vote at any regular meeting.

ARTICLE IV.—Officers.

Section 1. The officers of this Association shall be, President, Vice-President, Secretary and Treasurer. Their terms of office shall be for one year, or until their successors are elected and qualified.

Sec. 2. The President, Secretary and Treasurer shall constitute the Executive Committee.

Sec. 3. Vacancies in office — by death, resignation and otherwise — shall be filled by the Executive Committee until the next annual meeting.

ARTICLE V.—Amendments.

This Constitution shall be amended at any annual meeting by a two-thirds vote of all the members present — thirty days' notice having been given to each member of the Association.

BY-LAWS

ARTICLE I.

The officers of the Association shall be elected by ballot and by a majority vote.

ARTICLE II.

It shall be the duty of the President to call and preserve order at all meetings of this Association; to call for all reports of officers and committees; to

put to vote all motions regularly seconded; to count the vote at all elections, and declare the results; to decide upon all questions of order, and to deliver an address at each annual meeting.

ARTICLE III.

The Vice-Presidents shall be numbered, respectively, First, Second, Third, Fourth and Fifth, and it shall be

the duty of one of them, in his respective order, to preside in the absence of the President.

ARTICLE IV.

Section 1. It shall be the duty of the Secretary to report all proceedings of the Association, and to record the same, when approved, in the Secretary's book; to conduct all correspondence of the Association, and to file and preserve all papers belonging to the same; to receive the annual dues and pay them over to the Treasurer, taking his receipt for the same; to take and record the name and address of every member of the Association; to cause the Constitution and By-Laws to be printed in appropriate form, and in such quantities as may be directed by the Executive Committee from time to time, and see that each member is provided with a copy thereof; to make out and publish annually, as far as practicable, statistical table showing the number of colonies owned in the spring and fall, and the amount of honey and wax produced by each member, together with such other information as may be deemed important, or be directed by the Executive Committee; and to give notice of all meetings of the Association in the leading papers of the State, and in the bee journals at least four weeks prior to the time of such meeting.

Sec. 2. The Secretary shall be allowed a reasonable compensation for his services, and to appoint an assistant Secretary if deemed necessary.

ARTICLE V.

It shall be the duty of the Treasurer to take charge of all funds of the As-

sociation, and to pay them out upon the order of the Executive Committee, taking a receipt for the same; and to render a report of all receipts and expenditures at each annual meeting.

ARTICLE VI.

It shall be the duty of the Executive Committee to select subjects for discussion and appoint members to deliver addresses or read essays, and to transact all interim business.

ARTICLE VII.

The meeting of the Association shall be, as far as practicable, governed by the following order of business:

- Call to order.
- Reading minutes of last meeting.
- President's address.
- Secretary's report.
- Treasurer's report.
- Reports of committees.
- Unfinished business.
- Reception of members and collection.
- Miscellaneous business.
- Election and installation of officers.
- Discussion.
- Adjournment.

ARTICLE VIII.

These By-Laws may be amended by a two-thirds vote of all the members present at any annual meeting.

C. E. Yocom,
Aaron Coppin,
Geo. F. Robbins

Following is a copy of the law passed by the Illinois Legislature May 19th, and signed by the Governor June 7th, 1911, to take effect July 1st, 1911:

State Inspector of Apiaries.

Preamble.

§ 1. State Inspector of Apiaries—appointment—term—assistants—per diem.

§ 2. Foul Brood, Etc.—what declared nuis-

ances—inspection—notice to owner or occupant—treatment—abatement of nuisance—appeal.

§ 3. Annual Report.

§ 4. Penalties.

HOUSE BILL NO. 670.

(Approved June 7, 1911.)

An Act to prevent the introduction and spread in Illinois of foul brood among bees, providing for the appointment of a State Inspector of Apiaries and prescribing his powers and duties.

Whereas, the disease known as foul brood exists to a very considerable extent in various portions of this State, which, if left to itself, will soon exterminate the honey-bees; and

Whereas, the work done by an individual bee-keeper or by a State inspector is useless so long as the official is not given authority to inspect and, if need be, to destroy the disease when found; and

Whereas, there is a great loss to the bee-keepers and fruit growers of the State each year by the devastating ravages of foul brood;

Section 1. Be it enacted by the People of the State of Illinois, represented in the General Assembly: That the Governor shall appoint a State inspector of Apiaries, who shall hold his office for the term of two years, and until his successor is appointed and qualified, and who may appoint one or more assistants, as needed, to carry on the inspection under his supervision. The Inspector of Apiaries shall receive for each day actually and necessarily spent in the performance of his duties the sum of Four Dollars to be paid upon bills of particulars certified to as correct by the said State Inspector of Apiaries, and approved by the Governor.

Sec. 2. It shall be the duty of every person maintaining or keeping any colony or colonies of bees to keep the same free from the disease known as foul brood and from every contagious and infectious disease among bees. All bee-hives, bee-fixtures or appurtenances where foul brood or other contagious or infectious diseases among bees exists, are hereby declared to be nuisances to be abated as hereinafter prescribed. If the inspector of apiaries, shall have reason to believe that any apiary is infected by foul brood or other contagious disease, he shall have power to inspect, or cause to be inspected, from time to time, such apiary, and for the purpose of such inspection he, or his assistants, are authorized during reasonable business hours to enter into or upon any farm or premises, or other building or place used for the purpose of propagating or nurturing bees. If said inspector of apiaries, or his assistants, shall find by inspection that any person, firm or corporation is maintaining a nuisance as described in this section, he shall notify in writing the owner or occupant of the premises containing the nuisance so disclosed of the fact that such nuisance exists. He shall include in such notice a statement of the conditions constituting such nuisance, and order that

the same be abated within a specified time and a direction, written or printed, pointing out the methods which shall be taken to abate the same. Such notice and order may be served personally or by depositing the same in the post office properly stamped, addressed to the owner or occupant of the land or premises upon which such nuisance exists, and the direction for treatment may consist of a printed circular, bulletin or report of the Inspector of Apiaries, or an extract from same.

If the person so notified shall refuse or fail to abate said nuisance in the manner and in the time prescribed in said notice, the Inspector of Apiaries may cause such nuisance to be abated, and he shall certify to the owner or person in charge of the premises the cost of the abatement and if not paid to him within sixty days thereafter the same may be recovered, together with the costs of action, before any court in the State having competent jurisdiction.

In case notice and order served as aforesaid shall direct that any bees, hives, bee-fixtures or appurtenances shall be destroyed and the owner of such bees, hives, bee-fixtures or appurtenances shall consider himself aggrieved by said order, he shall have the privilege of appealing within three days of the receipt of the notice to the county court of the county in which such property is situated. The

appeal shall be made in like manner as appeals are taken to the county court from judgments of justices of the peace. Written notice of said appeal served by mail upon the Inspector of Apiaries shall operate to stay all proceedings until the decision of the county court, which may, after investigating the matter, reverse, modify or affirm the order of the Inspector of Apiaries. Such decision shall then become the order of the Inspector of Apiaries, who shall serve the same as hereinbefore set forth and shall fix a time within which such decision must be carried out.

Sec. 3. The Inspector of Apiaries shall, on or before the second Monday in December of each calendar year, make a report to the Governor and also to the Illinois State Bee Keepers' Association, stating the number of apiaries visited, the number of those diseased and treated, the number of colonies of bees destroyed and the expense incurred in the performance of his duties.

Sec. 4. Any owner of a diseased apiary or appliances taken therefrom, who shall sell, barter or give away any such apiary, appliance, queens or bees from such apiary, expose other bees to the danger of contracting such disease, or refuse to allow the Inspector of Apiaries to inspect such apiary, or appliances, shall be fined not less than \$50.00 nor more than \$100.00.

Approved June 7, 1911.

(Bill passed in the 47th General Assembly.)

Bee-Keepers' Association

§ 1. Appropriates \$1,000 per annum—pro-
viso.

§ 2. How drawn.
§ 3. Annual Report.

HOUSE BILL NO. 99.

(Approved June 5, 1911.)

An Act making an appropriation for the Illinois State Bee-Keepers' Association.

Whereas, The members of the Illinois State Bee-Keepers' Association have for years given much time and labor without compensation in the endeavor to promote the interests of the bee-keepers of the State; and,

Whereas, The importance of the industry to the farmers and fruit-growers of the State warrants the expenditure of a reasonable sum for the holding of annual meetings, the publication of reports and papers containing practical information concerning bee-keeping, therefore, to sustain the same and enable this organization to defray the expenses of annual meetings, publishing reports, suppressing foul brood among bees in the State, and promote the industry in Illinois;

Section 1. Be it enacted by the People of the State of Illinois represented in the General Assembly; That there be and is hereby appropriated for the use of the Illinois State Bee-Keepers' Association the sum of one thousand dollars (\$1,000) per annum for the years 1911 and 1912. For the purpose of advancing the growth and developing the interests of the bee-keepers of Illinois, said sum to be expended under the direction of the Illinois State

Bee-Keepers' Association for the purpose of paying the expenses of holding annual meetings, publishing the proceedings of said meetings, suppressing foul brood among bees in Illinois, etc.

Provided, however, That no officer or officers of the Illinois State Bee-Keepers' Association shall be entitled to receive any money compensation whatever for any services rendered for the same, out of this fund.

Sec. 2. That on the order of the President, countersigned by the Secretary of the Illinois State Bee-Keepers' Association, and approved by the Governor, the Auditor of Public Accounts shall draw his warrant on the Treasurer of the State of Illinois in favor of the treasurer of the Illinois State Bee-Keepers' Association for the sum herein appropriated.

Sec. 3. It shall be the duty of the treasurer of the Illinois State Bee-Keepers' Association to pay out of said appropriation, on itemized and receipted vouchers, such sums as may be authorized by vote of said organization on the order of the president, countersigned by the secretary, and make annual report to the Governor of all such expenditures, as provided by law.

Code of Rules and Standards for Grading Apiarian Exhibits at Fair as Adopted by Illinois State Bee-Keepers' Association.

COMB HONEY.

Rule 1. Comb honey shall be marked on a scale of 100, as follows:

Quantity	40
Quality	40
Style of display.....	20

Rule 2. Points of quality should be:

Variety	5
Clearness of capping.....	10
Completeness of capping.....	5
Completeness of filling.....	5
Straightness of comb.....	5
Uniformity	5
Style of section.....	5

Remarks: 1. By variety is meant different kinds, with regard to the sources from which the honey is gathered, which adds much interest to an exhibit.

2. By clearness of capping is meant freedom from travel stain and a water soaked appearance. This point is marked a little high, because it is a most important one. There is no better test of the quality of comb honey than the appearance of the cappings. If honey is taken off at the proper time, and cared for as it should be, so as to preserve its original clear color, body and flavor will take care of themselves, for excellence in the last two points always accompanies excellence in the first. Clover and basswood honey should be white; heartsease, a dull white tinged with yellow; and Spanish needle, a bright yellow.

3. By uniformity is meant closeness of resemblance in the sections composing the exhibit.

4. By style is meant neatness of the sections, freedom from propolis, etc.

5. Honey so arranged as to show every section should score the highest in style of display, and everything that may add to the tastiness and attractiveness of an exhibit should be considered.

EXTRACTED HONEY.

Rule 1. Extracted honey should be marked on a scale of 100, as follows:

Quantity	40
Quality	45
Style of display.....	15

Rule 2. The points of quality should be:

Variety	10
Clearness of color.....	5
Body	5
Flavor	5
Style of package.....	10
Variety of package.....	5
Finish	5

Remarks: 1. Light clover honey pouring out of a vessel is a very light straw color; Spanish needle, a golden hue, and dark clover honey, a dull amber.

2. Style of package is rated a little high, not only because in that consists the principal beauty of an exhibit of extracted honey, but also because it involves the best package for marketing. We want to show honey in the best shape for the retail trade, and that, in this case, means the most attractive style for exhibition. Glass packages should be given the preference over tin; flint glass over green, and smaller vessels over larger, provided the latter run over one or two pounds.

3. By variety of package is meant chiefly different sizes; but small pails for retailing, and, in addition, cans or kegs (not too large) for wholesaling, may be considered. In the former case, pails painted in assorted colors, and lettered "Pure Honey," should be given the preference.

4. By finish is meant capping, labeling, etc.

5. Less depends upon the manner of arranging an exhibit of extracted than of comb honey, and for that reason, as well as to give a higher number of points to style of package, a smaller scale is allowed for style of display.

SAMPLES OF COMB AND EXTRACTED HONEY.

Rule 1. Single cases of comb honey, entered as such for separate premiums, should be judged by substantially the same rules as those given for a display of comb honey, and samples of extracted, by those governing displays of extracted honey.

Rule 2. Samples of comb or extracted honey, as above, may be considered as part of the general display in their respective departments.

GRANULATED HONEY.

Rule 1. Candied or granulated honey should be judged by the rules for extracted honey, except as below.

Rule 2. The points of quality should be:

Variety	10
Fineness of grain.....	5
Color	5
Flavor	5
Style of package.....	10
Variety of package.....	5
Finish	5

Rule 3. An exhibit of granulated honey may be entered or considered as part of a display of extracted honey.

NUCLEI OF BEES.

Rule. Bees in observation hives should be marked on a scale of 100, as follows:

Color and markings.....	30
Size of bees.....	30
Brood	10
Queen	10
Quietness	5
Style of comb.....	5
Style of hive.....	10

Remarks: 1. Bees should be exhibited only in the form of single frame nuclei, in hives or cages with glass sides.

2. Italian bees should show three or more bands, ranging from leather color to golden or light yellow.

3. The markings of other races should be those claimed for those races in their purity.

4. A nucleus from which the

queen is omitted should score zero on that point.

5. The largest quantity of brood in all stages or nearest to that should score the highest in that respect.

6. The straightest, smoothest and most complete comb, with the most honey consistent with the most brood, should score the highest in that respect.

7. That hive which is neatest and best made and shows the bees, etc., to the best advantage should score the highest.

QUEEN BEES.

Rule. Queen bees in cages should be marked on a scale of 100, as follows:

Quantity	40
Quality and variety.....	40
Style of caging and display....	20

Remarks: 1. The best in quality consistent with variety should score the highest. A preponderance of Italian queens should overweigh a preponderance of black ones, or, perhaps, of any other race or strain; but sample queens of any or all varieties should be duly considered. Under the head of quality should also be considered the attendant bees. There should be about a dozen with each queen.

2. Neatness and finish of cages should receive due consideration, but the principal points in style are to make and arrange the cages so as to show the inmates to the best advantage.

BEESWAX.

Rule. Beeswax should be marked on a scale of 100, as follows:

Quantity	40
Quality	40
Style of display.....	20

Remarks: 1. Pale, clear, yellow specimens should score the highest, and the darker grades should come next in order.

2. By style is meant chiefly the forms in which the wax is molded and put up for exhibition. Thin cakes or small pieces are more desirable in the retail trade than larger ones. Some attention may be given to novelty and variety.

Foul Brood and Other Diseases of Bees

Foul brood—*bacillus alvei*—is a fatal and contagious disease among bees, dreaded most of all by bee-keepers. The germs of disease are either given to the young larval bee in its food when it hatches from the egg of the queen-bee, or it may be contagion from a diseased colony, or if the queen deposits eggs, or the worker-bees store honey or pollen in such combs. If in any one of the above cases, the disease will soon appear, and the germs increase with great rapidity, going from one little cell to another, colony to colony of bees, and then to all the neighboring apiaries, thus soon leaving whole apiaries with only diseased combs to inoculate others. The Island of Syria in three years lost all of its great apiaries from foul brood. Dzierzozon, in 1868, lost his entire apiary of 500 colonies. Cowan, the editor of the *British Bee Journal*, recently wrote: "The only visible hindrance to the rapid expansion of the bee industry is the prevalence of foul brood, which is so rapidly spreading over the country as to make bee-keeping a hazardous occupation."

Canada's foul brood inspector, in 1890 to 1892, reported 2,395 cases, and in a later report for 1893 to 1898, that 40 per cent of the colonies inspected were diseased. Cuba is one of the greatest honey-producing countries, and was lately reported to me by a Wisconsin bee-keeper who has been there, and will soon return to Wisconsin: "So plentiful is foul brood in Cuba that I have known whole apiaries to dwindle out of existence from its ravages, and hundreds more are on the same road to sure and certain death. I, myself, took, in 90 days in Cuba, 24,000 pounds of fine honey from 100 colonies, but where is that apiary and my other 150-colony apiary? Dead from foul brood." Cuba, in 1901, exported 4,795,600 pounds of honey, and 1,022,897 pounds of beeswax.

Cuba at present has laws to sup-

press foul brood, and her inspector is doing all possible to stamp the same from the island.

Even in Wisconsin I know of several quite large piles of empty hives, where also many other apiaries where said disease had gotten a strong foothold.

By the kindness of the Wisconsin bee-keepers, and, in most cases, by their willing assistance, I have, during the last five years, gotten several counties free of the disease, and at the present writing, March 12, 1902, have what there is in Wisconsin under control and quarantined. This dreadful disease is often imported into our State from other States and countries, so we may expect some new cases to develop until all the States shall enact such laws as will prevent further spread of the same. Arizona, New York (1899), California (1891), Nebraska (1895), Utah (1892), Colorado (1897), have county inspectors, and Wisconsin (1897), and Michigan (1901), have State inspectors. The present Wisconsin law, after five years of testing and rapid decrease of the disease, is considered the best, and many other States are now making efforts to secure a like law.

There are several experimental apiaries in Canada, under control of the Ontario Agricultural College; also a few in the United States, especially in Colorado, that have done great work for the bee-keeping industry, and their various published bulletins on the same are very valuable. The Wisconsin State Bee-Keepers' Association has asked that an experimental apiary might be had on the Wisconsin Experimental Farm, but at present there are so many departments asking for aid that I fear it may be some time before bee-culture will be taken up.

Causes of Foul Brood.

1. Many writers claim foul brood originates from chilled or dead brood. Dr. Howard, of Texas, one of the best

practical modern scientific experimenters, a man of authority, has proven beyond a doubt that chilled or common dead brood does not produce foul brood. I have, in the last five years, also proven his statement to be true in Wisconsin, but I do believe such conditions of dead brood are the most favorable places for lodgment and rapid growth of disease. Also, I do not believe foul brood germs are floating in the air, for, if they were, why would not every brood-comb cell of an infective hive become diseased? I believe that this disease spreads only as the adult bees come in contact with it, which is often through robber-bees. Brood-combs should not be removed from any colony on cold or windy days, nor should they be left for a moment in the direct rays of sunshine on hot days.

2. The foul brood may be caused by the need of proper food and temperature. Generally this disease does not appear to be serious during a honey-flow, but at the close of the honey season, or at time of scarcity, it is quite serious, and as the bees at such times will rob anywhere they can find stores, whether from healthy or diseased combs, it is the duty of every beekeeper to keep everything carefully protected. Hive-entrances contracted, no old combs or any article with a drop of honey in where the bees can get to it. While honey is coming in from the various flowers, quite a portion is used direct as food for the larval bee, and with such no disease would be fed to the bees. Such fed bees, even in a diseased hive, will hatch, as is often the case. I never knew a case where a bee hatched from a brood cell that had ever had foul brood in. If the germs of disease are there in the dried scale attached to the lower side walls, bees will store honey therein; the queen will deposit eggs, or the cell may be filled with pollen, or beebread, as some call it. Said honey, or pollen, when it comes in contact with those germs of disease, or the food given to the young bee, if in the proper temperature, said germs of disease will grow and develop rapidly.

Causes of Contagion.

I fully believe that if the history of foul brood in Wisconsin were known, nearly every case could be traced to contagion from diseased combs, honey, or from home diseased queen-breed-

ers' cages. There are some instances where I have traced the history of contagion in Wisconsin:

1. Diseased apiaries, also single colonies, sold either at auction or private sale. Several law suits have resulted in the settlement of some of the cases.

2. Brood-combs and various implements from diseased hives, used by other bee-keepers, and borrowed articles.

3. All the bees in an apiary dead from foul brood, and the hives having an abundance of honey in the brood-combs, said combs placed out by the side of hives, so that neighbor's bees might get the honey. From those combs I lined robber bees to seven other apiaries, and each time became diseased and were treated.

4. Robber bees working on empty honey packages in the back yards of grocery stores and baking factories. Said honey came from diseased apiaries, some located in far distant States, even Cuba.

5. Loaning of hives, combs, extractors, and even empty honey-packages.

6. Buying honey from strangers, or not knowing where it was produced, and feeding it to bees without boiling the honey.

7. Too common a practice of using old brood-combs from some apiary where the owner's bees have died from "bad luck," as he calls it.

8. Queen-bee—by buying queen bees from strangers and introducing her in the cages they came in. I have traced several new outbreaks of the disease to the hives where such queens were introduced, and the queens came from distant States. To be safe, on arrival of queen, put her carefully alone in a new and clean cage with good food in it. Keep her in there, warm and comfortable, for a few hours before introducing. The shipping cage and every bee that came with the queen should be put in the stove and burned. I do not think there is any danger from the queen so treated, even from diseased hives, but I do know of many cases where disease soon appear in the hives, where the shipping cage and bees were put in with the colony. The great danger is in the food in said cage being made from diseased honey. I was called to attend a State bee-keepers' meeting in another State, and I asked if any there had had experience with foul

brood. There was a goodly number of raised hands. Then I asked: "Do any of you think you got the disease by buying queen-bees?" Again several hands were raised. Even bee-keepers there had traced the disease in their apiaries to the buying of queens, and all from the same breeder. If you get queens from abroad, I hope you will do with them as I have described above. Better be on the safe side.

Experiments.

1. A prominent Wisconsin bee-keeper some years ago had foul brood among his bees so bad that he lost 200 colonies before the disease was checked. Having a honey-extractor and comb-foundation machine, he first boiled the hives in a large sorghum pan, then in a kettle all combs were melted after the honey was extracted; the honey was boiled and also the extractor and implements used. The bees were returned to their hives on comb-foundation he made from the wax made from the melted combs, then fed the boiled honey. Several years have passed, and there has been no sign of disease in his apiary since.

2. Foul-brood germs are not always killed when exposed to a temperature of 212 deg. F. (boiling point) for 45 minutes. But in every case where the combs are boiled in boiling water, and same were well stirred while boiling, no germs were alive.

3. Foul brood in brood-combs is not destroyed when exposed to the temperature of Wisconsin winters of 20 deg. below zero, and in one case I developed foul brood from combs that had been exposed to 28 deg. below zero.

4. Honey, if stored in diseased combs, acts as a preserving medium, and in such cases the germs of disease will remain so long as the comb is undisturbed. Four years at least.

5. Honey or beeswax, or the refuse from a solar or sunheat extractor, is not heated enough to kill foul-brood germs. Several cases of contagion where robber bees worked on solar extractor refuse or honey.

6. Comb-foundation made by supply manufacturers is free from live germs of disease and perfectly safe to use. To prove this experiment beyond a doubt, I took a quantity of badly diseased brood-combs from several apiaries and render each batch of combs into wax myself on the farm

where found. Then on my own foundation mill I made some brood-foundation. I also took quite a quantity more of said wax, went to two wholesale comb-foundation manufacturers, and both parties willingly made my experimental wax into comb-foundation, just the same as they do every batch of wax, I then divided the various makes of foundation, and selected 20 of the best bee-yards in Wisconsin, where no disease has ever been known; had the same placed in 62 of their best colonies, and in every case no signs of disease have appeared. Those same colonies continue to be the best in the various apiaries.

Symptoms of Foul Brood.

1. The infected colony is not liable to be as industrious. Hive entrance with few guard bees to protect their home. Sometimes fine dirt or little bits of old comb and dead bees in and around the hive-entrance, and often robber bees seeking entrance.

2. Upon opening the hive, the brood in the combs is irregular, badly scattered, with many empty cells which need inspection.

3. The cappings over healthy brood are oval, smooth, and of a healthy color peculiar to honey-bee brood, but if diseased, the cappings are sunken, a little darker in color, and have ragged pin holes. The dead larval bee is of a light color, and, as it is termed, ropy, so that if a toothpick is inserted and slowly withdrawn, this dead larva will draw out much like spittle or glue.

4. In this ropy stage there is more or less odor peculiar to the disease; it smells something like an old, stale gluepot. A colony may be quite badly affected and not omit much odor, only upon opening of the hive or close examination of the brood. I have treated a few cases where the foul brood odor was plainly noticed several rods from the apiary.

5. Dried Scales.—If the disease has reached the advanced stages, all the above described conditions will be easily seen and the dried scales as well. This foul matter is so tenacious that the bees cannot remove it, so it dries down on the lower side-wall of the cell, midway from the bottom to front end of the cell, seldom on the bottom of the cell. According to its stage of development, there will be either the shapeless mass of dark brown matter,

on the lower side of the cell, often with a wrinkled skin covering, as if a fine thread had been inserted in the skin lengthwise and drawn enough to form rib-like streaks on either side. Later on it becomes hardened, nearly black in color, and in time dries down to be as thin as the side walls of the cell. Often there will be a small dried bunch at the front end of the cell, not larger than a part of a common pin head. To see it plainly, take the comb by the top bar and hold it so that a good light falls into the cell at an angle of 75 degrees from the tip of the comb, while your sight falls upon the cell at an angle of about 45 degrees. The scales, if present, will easily be seen as above described. This stage of disease in combs is easily seen, and is always a sure guide or proof of foul brood. Such combs can never be used safely by the bees, and must be either burned or carefully melted. Be sure not to mistake such marked combs in the spring for those soiled with bee dysentery. The latter have a somewhat similar appearance, but are more or less surface soiled, and will also be spotted or have streaked appearance by the dark brown sticky excrements from the adult bees.

Treatment.

"A bee-keeper who does not discover foul brood, before his nostrils remind him that there is something wrong with his bees, is not the proper person to treat the case." Dr. Howard, in his valuable book on foul brood, states: "I regard the use of all drugs in the treatment of foul brood as a useless waste of time and material, wholly ineffectual, inviting ruin and total loss of bees. Any method which has not for its object the entire removal of all infectious material beyond the reach of both bees and brood, will prove detrimental and destructive, and surely encourage the recurrence of the disease." In Wisconsin, I have tried many methods of treatment, and cured some cases with each method; but the one that never fails, if carefully followed, and that commends itself, is the McEvoy treatment. Canada's foul brood inspector has cured foul brood by the wholesale—thousands of cases.

McEvoy Treatment.

"In the honey season, when the bees are gathering honey freely, remove

the combs in the evening and shake the bees into their own hives; give them frames with comb-foundation starters, and let them build comb for four days. The bees will make the starters into comb during the four days, and store the diseased honey in them, which they took with them from the old comb. Then, in the evening of the fourth day, take out the new combs and give them comb-foundation (full sheets) to work out, and then the cure will be complete. By this method of treatment all the diseased honey is removed from the bees before the full sheets of foundation are worked out. All the old foul-brood combs must be burned or carefully made into wax, after they are removed from the hives, and all the new combs made out of the starters during the four days must be burned or made into wax, on account of the diseased honey that would be stored in them. All the curing or treating of diseased colonies should be done in the evening, so as not to have any robbing done, or cause any of the bees from the disease colonies to mix and go with the bees of healthy colonies. By doing all the work in the evening, it gives the bees a chance to settle down nicely before morning, and then there is no confusion or trouble. This same method of curing colonies of foul brood can be carried on at any time from May to October, when the bees are not getting any honey, by feeding plenty of sugar syrup in the evenings to take the place of the honey flow. It will start the bees robbing and spread the disease, to work with foul brood colonies in warm days when the bees are not gathering honey, and for that reason all work must be done in the evenings when no bees are flying.

"When the diseased colonies are weak in bees, put the bees, two, three, or four colonies together, so as to get a good sized colony to start the cure with, as it does not pay to spend time fussing with little, weak colonies. When the bees are not gathering honey, any apiary can be cured of foul brood by removing the diseased combs in the evening and giving the bees frames with comb-foundation starters on. Then, also, in the evening feed the bees plenty of sugar syrup, and they will draw out the foundation and store the diseased honey which they took with them from the old combs; on the fourth evening remove the new

combs made out of the starters, and give the bees full sheets of comb-foundation, and feed plenty of sugar syrup each evening, until every colony is in first class order. Make the syrup out of granulated sugar, putting one pound of water to every pound of sugar, and bring it to a boil. As previously stated, all the old comb must be burned, or made into wax, and so must all new combs made during the four days. No colony is cured of foul brood by the use of any drug.

A. I. Root, of Medina, Ohio, says: "The starvation plan, in connection with burning the combs and frames and building the hives, has worked the best in treating foul brood. It never appeared after each treatment, though it did in some cases where the hives were honey-stained and not boiled, thus confirming the theory or fact of spores."

All the difference from the McEvory treatment that I practice is this: I dig a deep pit on level ground near the diseased apiary, and after getting a fire in the pit, such diseased combs, frames, etc., as are to be burned are burned in this pit in the evening, and then the fresh earth from the pit returned to cover all from sight. Often I use some kerosene oil, a little at a time being poured on old broodcombs, or those having much honey in, as they are hard to burn. If diseased combs with honey in are burned on the surface of the soil, there is great danger; the honey, when heated a little, will run like water on the soil, and in the morning the robber bees will be busy taking home the diseased honey that was not heated enough to kill germs of foul brood.

I also cage the queen while the bees are on the five or six strips of foundation. It helps to keep the colony from deserting the hive and going to other colonies.

R. L. Taylor, Michigan University Experimental Apiary, reports: "The plan that the colony be shaken out into another hive after being allowed to build comb for four days, I have proven, in 100 cases, to be unnecessary."

In Wisconsin I, too, have cured several cases by the one transferring, when honey was not coming in very freely, but it is better, and a great saving of time to both bees and owner, to exchange in three or four days,

those foundation starters, for full sheets of foundation. Diseased broodcombs and those with honey in, if melted in a sun or solar extractor, the wax, honey or residue is not hot enough to kill germs of foul brood. This I have proven by several experiments. It must be boiled and well stirred while boiling, to be safe.

I do not believe in, or practice, burning any property, such as hives, bees, beeswax or honey, that can be safely treated and saved. Many times it is poor economy to save all, and so many bee-keepers are not so situated as to keep all diseased material from robber bees while taking care of it; the best and only safe way is to burn the diseased combs and frames.

Utah.

Utah has county inspectors, and from one who has remarkable success I copy the report of his method of treatment:

"Wherever found it should be dealt with earnestly and with dispatch. If the colony is weak, I recommend something the bees, and in order to do this without letting a bee escape, take a tablespoonful of sulphur and place it in the hive entrance of the hives; if there is any breeze, turn the hive so it will blow in the entrance. Then fire the sulphur and it will soon kill the bees. This should be done early in the morning, before any of the bees are flying, as one bee escaping from the hive might carry the disease to any colony with which it may take up its abode. If the colony is a strong one, I would keep the entrance partly closed, so as to prevent any other bees from getting in. Then as soon as fruit blossoms come out so the bees can obtain honey, I treat them. I procure an empty box of any kind, so it is clean, then find the queen, put her in a screen wire cage, which is easily made. Take a small piece of screen roll it up and tie a string around either end; cork up one end, then place the queen and a few workers, for company, in the cage, and place in the other end cork. Put same in this box, and shake all the bees out of their hive into this box. This must be done in the evening, when no bees are flying. Keep the queen in this box for 24 to 48 hours, allowing the bees to fly in and out as they please. Next take a clean hive, with good, healthy combs or founda-

tion, and shake bees into it, letting the queen go, and they will be free from disease. The old combs are melted into wax, bringing same to a good boil. Often washing with boiling water any hives or implements that might contain disease. Whenever strictly followed, this has affected a cure."—C. Wilcox, Emery Co., Utah.

Pickled Brood.

Some seasons pickled brood is quite bad among bees, and in a few cases I have known it to reduce large colonies, even large apiaries, to doubtful hopes, but those same colonies, after I gave them treatment, were in a month free from disease. Sometimes it takes as careful handling as if foul brood. I do not believe it is contagious, for all I have seen 60 colonies in one apiary badly reduced by it. As an experiment, one of my out-apiaries had 50 colonies at one time with pickled brood. I treated them, and all were soon free from dead brood. At the same time I took ten of the worst brood-combs, where at least two-thirds of the brood were dead, and placed these combs in other strong, healthy colonies. They at once cleaned out the dead brood, and reared as nice brood as one could ask for.

Symptoms.

The larval bees (in last of May and through June) show light brown spots; a little later the cappings have small holes in—the cappings are not shrunk-en or dark colored, as in foul brood. The dead bee will be first swollen, with a black head dried to a hard bunch, and often turned up—Chinaman-shoe-like. The skin of the dead bee is quite tough, and, if punctured, the thin, watery fluid of the body will flow as freely as water, often a little yellow or brownish colored from the dissolved pollen from the abdomen of the bee. It has very little or no smell; does not at any time stick to the walls of the comb; is easily pulled out of the cell; is never ropy or sticky, and, if the colony is properly cared for, the bees will take care of themselves. Plenty of liquid, unsealed honey and pollen near the brood, and hives so protected as to keep the bees and brood comfortable on cold days and nights.

Never put bees on old black brood-combs, or those with dead broods in; better make wax of the combs, and

give the bees full sheets of broodcomb foundation.

Treatment.

Keep all colonies strong, with plenty of unsealed honey near the brood, and if hives are properly sheltered, so as to be warm on cold days and nights, there will be little or no pickled brood. If the queen is old, shows signs of weakness by putting several eggs in one brood-cell and nursing several others, so that the brood is patchy, I would kill such a queen, feed the bees a little, and, when queen-cells are started, remove them all and give them a queen and bees, between two of her own brood-combs from a hive where she has lived. I do not think pickled brood is often the fault of the queen, but rather a lack of proper food and heat in the hive. In most cases, a shortage of liquid honey, or moldy pollen, even in hives with plenty of sealed honey in the outer combs. There is a time in spring in Wisconsin, between dandelions and white clover bloom, when there is no honey coming in from flowers, and often cold days and nights, so that the live bees consume the liquid, unsealed honey first, and cluster in a compact body to keep warm; the result often is the larval bee, just changed from the egg to a tender little grub, is either starved, half-fed or chilled, so that it grows slowly, and too often it dies, and then it is we first notice this about the time white clover honey begins to come in. In other parts of the state, where pickled brood appeared, it was from the same cause, and at other dates, which was due to a difference of time of honey bloom.

Wherever I fed daily some honey, or even sugar syrup, and kept the hive warm, all dead brood soon disappeared while in the same apiaries other colonies affected and not so treated, continued for some time, but got rid of it as soon as treated.

Strong colonies of bees in the fall, with a young laying queen, and an abundance of good honey, sealed or capped by the bees, if properly cared for during winter, whether in the cellar or in chaff hives, wintered out of doors in sheltered location, seldom have pickled brood, chilled or other dead brood, or dysentery, and are the colonies that give their owner profit.

Black Brood.

Black brood is another fatal and contagious disease among bees, affecting the old bees as well as the brood. In 1898, 1899 and 1900, it destroyed several apiaries in New York. Last year I found one case of it in Wisconsin, which was quickly disposed of. Dr. Howard made more than a thousand microscopic examinations, and found it to be a distinct form of bacteria. It is most active in sealed brood. The bees affected continue to grow until they reach the pupa stage, then turn black and die. At this stage there is a sour smell. No decomposition from putrefactive germs in pickled brood. In black brood the dark and rotten mass in time breaks down and settles to lower side-walls of the cell; is of a watery, granulated, syrupy fluid, jelly-like; is not ropy or sticky, as in full brood, and has a peculiar smell, resembling sour, rotten apples. Not even a house fly will set a foot upon it.

Treatment.

Best time is during a honey-flow, and the modified McEvoy plan, much as I have treated foul brood, by caging the queen five days, remove the foundation starters, and giving full sheets, keeping queen caged five days longer. As great care should be taken of diseased hives, combs, honey, etc., as in foul brood.

Dysentery.

Dysentery among bees in Wisconsin in the spring of the year is often quite serious. Many colonies die with it. Dysentery is the excrements of the old bees; it is of brownish color, quite sticky, and very disagreeable smelling, and is sometimes mistaken for foul brood.

Causes.

1. Bees confined too long in the hives, so that they can no longer withhold their excrements, and are compelled to void the same on the other bees and combs.

2. Poor winter stores, gathered in the fall from honey-dew, cider mills, sorghum mills, rotten fruit; also some kinds of fall flowers.

3. Old and especially moldy pollen or bee-bread.

4. Hives too cold or damp. If moisture from the breath of the bees is

not carried out of the hive by some means, such as through a deep cushion of some kind over the bees that will absorb moisture and at the same time retain the heat, or by some means of ventilation, so that all is dry and comfortable. If mold forms on the combs or cellar is so damp as to form mold, there is great danger the bees will have dysentery and die.

Treatment.

1. First of all, have an abundance of combs of sealed clover or basswood honey in brood-frames carefully saved, and see that each colony is wintered on such food. Three or four such combs will winter a fair colony safely, if confined on those combs late in the fall, and the hive contracted to fit the same. This is one of the most important conditions for success in wintering.

2. If in the fall the bees have gathered this unwholesome honey from the above named sources, it should all be extracted and either exchanged for those honey-combs, or feed the bees good honey or sugar syrup until winter stores are secured. This should be done before cold weather in the fall.

3. Hives contracted and made comfortable, whether in cellar or outdoors.

4. If wintered in chaff hives outdoors, with feed as above directed, and there come one or two warm spells during winter, so that the bees can have a cleansing flight, they will not have dysentery or dead brood, and will be much stronger when clover opens.

If wintered in the cellar, the bees will not need so much honey, and if the winters are generally long, with doubtful warm spells, the cellar will be best. But to keep the bees from dysentery, so often fatal to cellar-wintered bees, they should have such winter stores as above spoken of, then the cellar kept at a medium temperature, about 32 deg. F., ventilated so the air is fresh, and no mold will form in the cellar. Fresh air-slaked lime on the bottom of the cellar may help, if it is damp or has poor air.

5. Dysentery will not appear if bees are kept on sugar syrup, or best grade white clover or basswood honey, and are in a dry place, either sheltered by cellar or chaff-hive.



C. P. DADANT, President.

PROCEEDINGS

—OF THE—

Twenty-first Annual Session

—OF THE—

Illinois State Bee-Keepers' Association

NOVEMBER 23 and 24, 1911,

AT THE STATE HOUSE.

The 21st Annual Meeting of the Illinois State Bee-Keepers' Association was held in the State House at Springfield, Ill., November 23 and 24, 1911.

The meeting was called to order by the President, C. P. Dadant, at 10 a. m., November 23d. Prayer was offered by George W. York, of Chicago.

Pres. Dadant—I desire to thank you for the very fine compliment I received last year. I was laid up with rheumatism, and I received a telegram from this convention. I want to tell you I appreciated it; it made me very glad. I want to thank the membership for that attention.

Pres. Dadant—The Secretary will read the minutes of the last meeting.

MINUTES OF THE LAST MEETING NOVEMBER 17, 1910.

The 20th annual session was called to order at 10:00 A. M., by Vice-President W. B. Moore.

Prayer was offered by Mr. York. The Secretary announced that the President would not be with us on account of illness.

Whereupon, the Secretary was instructed to send a telegram expressing our regret on account of his absence.

The minutes of the last meeting were read and approved. Secretary's report was read and adopted as read.

Treasurer's report read and referred to auditing committee, appointed by the Chair as follows: Messrs. York, Bowen and Pyles.

Secretary's financial report read and referred to the same committee.

Mr. York moved that the Chair appoint a committee, of three, on resolutions immediately after dinner. Carried.

The Chair appointed as such committee: York, Moore and Pyles, and to them was referred all the matter named in the Secretary's report.

A motion prevailed to have a picture taken of the members present in a group to be placed in the 10th Annual Report, before dinner tomorrow.

Adjourned to 1:00 o'clock p. m.

One o'clock p. m.

It was at this hour the Chair announced the resolution committee above named.

Dr. Bohrer's paper was read by the Secretary. "Legislation on Foul Brood," referred to committee on resolutions.

Motion made by Mr. York prevailed, that Drs. Bohrer and Phillips' suggested bills be referred to a legislative committee of three to be appointed by the Chair.

Committee as follows: C. P. Dadant, Jas. A. Stone, and I. E. Pyles.

Mr. A. L. Kildow (Foul Brood Inspector) reported on his work for the year, giving a map illustrating the prevalence of American and also European Foul Brood in the State.

Report was approved, and he was advised to present same before the Legislature in aid of our Foul Brood Law.

The Secretary read a letter received from President Dadant, and it was referred to committee on resolutions.

Dr. Phillips made a very fine address, recommending a way of coming at the Bee Keepers of the State, and the matter was referred to the committee on resolutions.

A paper by Dr. Bohrer was read by Mr. York, on "Treatment of Foul Brood."

Question box was next in order.

A motion prevailed to elect officers at 10:00 a. m., tomorrow, second day.

A motion was made by the Secretary that the Constitution be changed, charging a fee of fifty cents (50c) to affiliating members instead of twenty-five cents (25c). Carried.

On motion a recess was taken to 7:30 p. m. tonight.

Evening session at 7:30 p. m. spent hearing report of Committee on Resolutions and with the question box.

The following resolution was heard:

One recommending New Orleans as the place for holding the Panama Exposition.

All the resolutions were adopted.

Adjourned at 9:30 p. m. to meet at 9:00 a. m. next day.

9:00 a. m. (the 18th).

Called to order.

The code of rules for judging honey at fairs was taken up and considered.

No changes were made except in R. 4 Comb Honey; the latter clause relating to the size of the section was stricken out.

A motion was made to do away with the manipulating of bees at our State Fair.

After being discussed it was left to the Executive Committee to decide.

Proceeded to the election of officers, with the following result:

Four Brood Inspector, A. L. Kildow.

President, C. P. Dadant.

1st Vice-President, W. B. Moore.

2d Vice-President, J. W. Bowen.

3d Vice-President, I. E. Pyles.

4th Vice-President, Aaron Coppin.

5th Vice-President, Louis Werner.

Before the election of Secretary and Treasurer, their salaries were fixed, the Secretary at \$75.00 and the Treasurer at \$25.00 for the ensuing year.

Jas. A. Stone was re-elected Secretary, and Chas. Becker, Treasurer.

The following were elected honorary members: Dr. E. F. Phillips, Dr. G. Bohrer, Miss Lillian M. Stewart.

Adjourned sine die, at 11:00 o'clock a. m., the 18th of November, 1910.

Pres. Dadant—You have heard the Secretary's minutes; what shall we do with them?

Mr. York—I move that the minutes be approved.

Motion seconded and carried.

Pres. Dadant—The next thing in order is the President's address. I am not a believer in long addresses, therefore, I have not prepared one. I will simply say a few words about the work of the Association for the past year. Most of you have helped in the passage of the Foul Brood law, which has been a big success for our Association. This we tried to get for a number of years, and we have at last succeeded. We had the help of the Chicago-Northwestern Association; the help of the Department of Agriculture; Dr. Phillips, of Washington, did all he could for us. We had the help of Mr. N. E. France, General Manager of the Na-

tional; also the Eastern Illinois State Bee-Keepers' Association, whose President is with us today. The law is not quite as perfect as we hope to have it, because some changes were made at the last minute by the Attorney General, but we have something that in the course of time can be improved upon. The legislators have recognized our need of, and right to, laws, so that now Illinois is on a par with Indiana, Wisconsin, Ohio, and other states on that matter. We hope still to make some changes, and we will probably have to go before the Legislature again. We have also succeeded in getting an appropriation. You know all these things, but I thought well to call attention to them. This has probably been the largest work this Association has ever done.

There is now before us a change proposed in the Constitution of the National Association, and it remains to be seen whether that change is at present needed, or is advisable; the majority will have to decide it. We thought best to discuss it at this meeting. We will now have the report of the Secretary, of the work done during the past year:

SECRETARY'S REPORT FOR 1911.

When we made our report last year we were proud of the fact that our membership had made an increase of just 30 members more than the year before.

Last year our total membership was 286, and, as we just stated, a gain of 30 over the preceding year.

This year our total membership is 302, a gain of only 16 over last year.

The membership of those coming direct into the State Association last year was 177; this year, 219—a gain of 42 members over last year.

The membership coming through the Chicago-Northwestern last year was 86; this year, 66—a decrease of 20 members.

Those joining through the Northern Illinois and Southern Wisconsin last year were 17; this year, 14—a loss of 3.

Last year we had 6 members coming through the Western; this year none.

So the total gain this year, though small, was on account of the large gain in the members who came direct into the State Association.

We received a good many members

direct during the year who had previously come through other associations, and the reason is simply because it was the cheapest way to get to the same end, viz.: Two memberships and the annual report.

These conditions are all right for the State Association, but while you cannot keep people from going where they can get what satisfies them for the least money, we are sorry to see the smaller organizations going down, for we had thought the affiliation plan would build up many small neighborhood societies, and we are still hopeful that in the future it will result favorably.

This matter was a burden on our mind when we were considering the adoption of the new constitution by the National.

We had 300 copies of our report this year bound in cloth, and 100 in paper, and before they were out of the printing office we were compelled to order 20 more copies, cloth bound, for the reason that, besides our membership of 302, there are new calls coming in from State and other libraries.

While last year we had 7 such calls, this year we had 15.

In view of the fact that we are able to determine beforehand about the number of cloth bound copies needed, we think it advisable to publish our report as soon as possible after the holidays.

The resolution sent to Congress last year, recommending New Orleans as the place for holding the World's Panama Exposition for 1915, did not avail, because New Orleans was asking for a large appropriation by Congress, and later San Francisco (which was a bidder for the same) pledged for the whole amount, and asked for no appropriation. So, as a matter of course, New Orleans was not considered.

One of the greatest causes for the continued increase in our membership is through the 1,200 blanks sent out to that number of bee-keepers in the State, for which we are greatly under renewed obligations to Editor York for the use of his mailing list.

Before these blanks are sent out for the next year we will have to know what change is made, if any, in relation to our membership in the National, and, therefore, they cannot be sent out till after the vote is announced

on the adoption of the new Constitution.

Some action will be necessary in this meeting, providing for a possible change of the National Constitution.

The blank petitions sent out to 1,200 bee-keepers for a Foul Brood law brought us over 500 signers, and seemed to attract particular attention when placed over against a remonstrance signed by a single man.

We spoke in our last report of the aid in adding members that came from the State Inspector and his assistants. The same has been the case this year, but not so many, as the Inspector's office was an uncertain factor for a good part of the season.

In our last year's report we spoke of the move the National made at Albany regarding a raise in the fees. The present change in its Constitution now being voted on, should the new Constitution be elected, provides that the affiliating societies pay \$1.00 per member, but is it not a fact that we can still join the National and renew at fifty cents (50c), and no way for them to drop our names till our year is up? That is the way we felt obligated to carry our members, who came in last year on November 1st, at twenty-five cents (25c) through the Northern Illinois and Southern Wisconsin, though we changed the fee at our meeting, only 16 days later, to fifty cents (50c) per member.

Not knowing what is to be—it seems to me the only action we can take is on what now exists.

At our State Fair last month the exhibition of handling bees in wire cages became quite interesting by being competitive, two parties having made entries for that premium, and only one premium.

In order to keep peace and quiet, there being a majority of the Executive Committee present, they pledged a second premium of \$10.00 from the Association State Fund, and they wish to recommend that the Executive Committee apply to the State Board for second and third premiums to be added to that entry.

Your Legislative Committee, viz., Dadant, Pyles, and Stone, appointed last year to carry out the sense of the meeting to secure a Foul Brood law making the State Entomologist the Inspector, proceeded to carry out their work in the following manner:

The Chairman (Dadant, appointed by the committee) called a meeting to wait upon Professor Forbes, at Champaign, and see if we could get through the University what we thought would be to the best interests of our industry.

But Professor Forbes being absent, the committee failed to see him; but they formulated a letter upon which they were unanimous, asking Professor Forbes if he would, in case we co-operated in getting the Bill as we had proposed, and succeeded, give our Association any voice in the appointment of a State Inspector.

His answer to us was that he would be handicapped by no one.

Whereupon our Chairman called a second meeting of the committee at Peoria (the most convenient point), to know what action to take. The committee were all present, and it was the unanimous decision that we would proceed to apply for the same law that we had sent out so many petitions to obtain.

Thereupon our Chairman corresponded with all the Legislative Committee that had been previously appointed, and their decision was unanimous with that of your committee.

The following letter, dictated by the Chairman, was then sent out to a thousand or more bee-keepers throughout the State:

To the Illinois Bee-Keepers:

Dear Sir—The bee-keepers of the State are hereby notified that the committee of ten elected in 1909 by the State Association, and the committee of three elected in 1910, for the purpose of securing legislation, have jointly and unanimously resolved to apply to the Legislature for the foul-brood law published in the petition, which has been signed by hundreds of bee-keepers. This is almost identical with the Wisconsin law. The only change which is expected to be made is a demand for an appropriation of not to exceed \$3,000 for the State Association of Bee-Keepers, three-fourths of which to be available for foul brood. The sum of \$600 has been considered as altogether too small, owing to the alarming increase of foul brood in the State.

Bee-keepers all through the State are hereby requested to urge the passage of the law with their representatives and senators. Copies of the foul brood law and petition will be forwarded promptly to all who will apply to the Secretary, Jas. A. Stone, R. 4, Springfield, Illinois.

The bee-keepers who are able to wield any influence at the State House are requested to correspond with Secretary Stone, in order to join forces for the occasion.

C. P. DADANT,
I. E. PYLES,
J. A. STONE,
Committee.

You will hear more about the work of the committee before our meeting ends.

Pres. Dadant—You have heard the Secretary's report; what shall we do with it?

Mr. Becker—I move that it be received, approved, and placed on file.

Motion was seconded and carried.

Pres. Dadant—I think that the committees ought to be appointed. What is the wish of the meeting in regard to the appointment of committees? We ought to have a Committee on Resolutions, and perhaps another committee.

Mr. Pyles—I move that the Chairman be instructed to appoint a Committee on Resolutions, and a Committee on Reports; and any other committees that may properly come before us. I mean the Resolution Committee and the Auditing Committee, and any other committee.

Dr. Bohrer—I live in Kansas, and I don't think it would be out of the way to keep a Legislative Committee.

Pres. Dadant—That is, I think, a good suggestion.

Dr. Bohrer—In order that any defects in your law, if there are any, can be referred to them, and brought before them in the future for consideration and action; I believe it would be a good thing to appoint a Legislative

Committee, consisting of probably three members.

Pres. Dadant—As I understand it, there was a motion made, but not seconded yet, to have committees appointed. Mr. Pyles, will you add that to your motion?

Mr. Pyles—I will accept that.

Mr. Becker—I second the motion.

Mr. Stone—I would suggest that the Legislative Committee be the Executive Committee of our Association; then they can attend to anything that comes up in the order it comes. They are really the Trustees—President, Secretary, Treasurer.

Pres. Dadant—It is for the meeting to decide.

Mr. York—I think the motion provides that the President shall appoint these committees. He can appoint those same people.

Mr. Moore—The presiding officer of any association is ex-officio Chairman of all committees.

Mr. Pyles—I never would appoint over three—a larger committee is very unwieldy. You can always get a committee of three together because two are a majority.

The motion was put and carried.

Pres. Dadant—If there is nothing else, we will hear the Treasurer's report:

TREASURER'S REPORT.

Chas. Becker, Treasurer, In Account with State Bee-Keepers Association.

	Dr.	Cr.
1910.		
Nov. 18. To balance on hand.....	\$ 1,121 80	
Nov. 18. J. A. Stone	89 25	
Dec. 26. L. C. Dadant (per J. A. Stone) Association Fund..	24 00	
1911.		
July State Treasurer	1,000 00	
Sept. 12. J. A. Stone (fees for members), Association Fund..	100 00	
	\$ 2,335 05	
1910.		
Nov. 18. By C. P. Dadant (order No. 14).....		\$ 20 18
Nov. 18. By N. A. Cluck (order No. 15).....		8 20
Nov. 18. By J. A. Stone, salary (order No. 16).....		75 00
Nov. 18. By J. A. Stone, exp. of Ass'n (orders Nos. 17, 18)....		129 39
Nov. 18. By C. Becker, expense of bond (order No. 19).....		25 00
Nov. 20. By Geo. W. York (order No. 20).....		9 40
Nov. 20. By Dr. Bohrer (order No. 21).....		14 10
Dec. 20. By Miss Stewart, reporting (order No. 23).....		80 00
Dec. 21. By Geo. W. York, printing, etc. (order No. 22)....		30 25
1911.		
Jan. 4. By C. P. Dadant, committee (orders Nos. 24, 25)....		17 70
Jan. 31. By Miss Stewart, reporting (order No. 26).....		96 00
Feb. 2. By C. P. Dadant, committee (orders Nos. 27, 29)....		17 08
Mch. 8. By Geo. W. York, committee (orders Nos. 27, 31)....		18 70
Mch. 8. By I. E. Pyles, committee (order No. 28).....		18 56
Mch. 8. By A. L. Kildow, committee (orders Nos. 30, 34)....		56 14
May 6. By E. J. Baxter, committee (order No. 32).....		37 02
May 26. By C. P. Dadant, committee, (orders Nos. 33, 36)		17 64
June 24. By Illinois State Register (order No. 35).....		282 50
July 5. By Frank Hinderer, Inspector (order No. 37).....		5 25
July 5. By A. L. Kildow, Inspector (order No. 38).....		55 44

July 5.	By L. C. Dadant, postage (order No. 39).....	10 00
July 11.	By Arthur Lee (order No. 40).....	9 81
July 14.	By E. J. Baxter (order No. 41).....	9 58
Sept. 12.	By J. A. Stone (order No. 42).....	109 33
Oct. 24.	By C. Becker (order No. 43).....	6 88
Oct. 24.	By Arthur Lee (order No. 44).....	2 98
Oct. 24.	By Frank Hinderer (order No. 45).....	3 70
Nov. 23.	By balance	\$ 1,174 83
		1,160 22
		\$ 2,335 05
Nov. 23.	To balance in Ass'n Fund.....	\$ 234 94
Nov. 23.	To balance in State Fund.....	925 28
Total		\$ 1,160 22

Mr. Stone—That just corresponds with my book all the way through. There is one thing looks pretty hard on the Secretary—getting so much money. The money that he charged up as being collected by the Secretary was for the expenses of the Association, and then the money he received from the Secretary, part of it, he credited to Louis C. Dadant. It was a check that came from him, but it came through the Secretary—was for fees turned over. Those things not being itemized, as to what they were for, make it look like the Secretary got all the money.

Pres. Dadant—The vouchers are there. You have heard the Treasurer's report—what will we do with it?

Mr. Pyles—I move that it be referred to the Auditing Committee.

Motion seconded and carried.

Appointment of Committees.

Pres. Dadant appointed as the Auditing Committee, Messrs. Moore, York, and Kildow; as the Resolution Committee, Mr. Pyles, Dr. Bohrer, and J. H. Roberts; and as the Legislative Committee, Messrs. Baxter, Stone, and Becker.

Dr. Bohrer—I would like to know who is the Chairman of the Committee on Resolutions.

Pres. Dadant—Mr. Pyles.

Dr. Bohrer—All I can do is to suggest something to the committee.

Pres. Dadant—I have often served on a Resolution Committee, and I find that the main thing is to suggest subjects, and then let one man, the man who can, draw up the resolutions. If the members of the committee will go to the Chairman of the committee and

suggest subjects, he can draw up the resolutions, and you can suggest any changes as you think good to be made. There is no need of any great effort on any one's part, especially in an association like this, where your resolutions are not so important, nor carry as much weight as in some meetings. You take it in the Upper Mississippi River Improvement Association—there the only business is to present resolutions, and they are most important. The most important thing here is the discussing of our interests and passing on the management, although we may pass some important resolutions. Any members can give to that committee suggestions they have to offer.

Mr. Pyles—If any of you have anything to suggest in the form of a resolution, that you would like to have this committee act upon, please present it in writing, if you will, any time between now and tomorrow morning.

Pres. Dadant—I would suggest that you bring whatever you may have on your minds before this committee, and they then can perfect the resolutions between now and tomorrow morning, and have them passed tomorrow morning; and, if possible, that we have the report of the Auditing Committee tomorrow morning. The Legislative Committee will be a standing committee, and they will have nothing to report at present.

If there is no unfinished business, I think it would be well to have reception of members, and the collection of dues. Perhaps we would better have a recess.

Mr. Stone—I did not read the Secretary's Financial Report.

Pres. Dadant—If there is no objection, we will have the Secretary's Financial Report now:

SECRETARY'S REPORT.

Jas. A. Stone, Secretary, in Account with the Illinois State Bee-Keepers' Ass'n.

1910.		Dr.	Cr.
Nov. 16.	To balance on hand	\$ 89 25	
Dec. 20.	To Louis C. Dadant (for 48 fees).....	24 00	
1911.			
Aug. 31.	To Louis C. Dadant (14 fees).....	7 00	
Aug. 31.	To fees to date (168).....	186 00	
Oct.	To 14 fees from Sec'y N. Ill. and S. Wis.....	7 00	
Nov. 20.	To 8 fees received since Aug. 31st.....	8 00	
Nov. 20.	To Louis Dadant, 2 fees since Aug. 31st.....	1 00	
		\$ 322 25	
1910.			
Nov. 18.	By amount turned over to Treasurer Becker.....		\$ 89 25
Dec. 20.	By fees turned over to Treasurer Becker.....		24 00
1911.			
Aug. 31.	By N. E. France for 186 fees to Nat.....		93 00
Aug. 31.	By Chas. Becker, check.....		100 00
Nov. 20.	By N. E. France, 8 fees to Nat.....		4 00
Nov. 20.	By balance		12 00
			\$ 322 25
Nov. 20.	To balance on hand.....	12 00	

Pres. Dadant—Are you ready to act upon the Secretary's report? If there is no objection, and there is no motion, we will simply refer it to the Auditing Committee. It is so referred. The next thing in order will be the reception of members and the collection of dues. We will have a recess of five minutes, for those who wish to have their names enrolled, or to pay their dues.

Meeting adjourned for five minutes.

Convention called to order by President.

Pres. Dadant—Dr. C. C. Miller was to have had an address, but he is not present. The next man is Mr. W. B. Moore, with an essay on "Foul Brood."

Mr. Moore—I should prefer to wait until after dinner.

Pres. Dadant—The next is Mr. York, on the "National Bee-Keepers' Association."

Mr. Stone—We would better have that this afternoon.

Pres. Dadant—We might have a Question-Box. Do you wish to appoint a committee, or will you simply bring up questions? Let each one who wants to ask a question, write it and bring it to the desk.

Dr. Bohrer—While that is going on, I would like to say a few words on the matter of legislation. I would advise the members of this Association to formulate a resolution strongly complimenting your State Legislature for giving you the laws you have been given; you may need additional legislation, and you cannot treat them too

kindly. I would manage to get that before as many of the members of the Legislature as possible. It will show them that we appreciate what they have done. The resolution ought to be a highly complimentary one.

Pres. Dadant—I think it is a very nice thing to write compliments, especially when we mean them. It is a mistake to write compliments we don't mean; but when we mean them, we can generally write things that are pleasant, and make people feel kindly towards us. When our law was passed, we had had so much to do with the Legislature, and the Governor had treated us so kindly, I felt in duty bound to write him a letter. And he responded to me by saying: "Such letters as these are pleasant, indeed." I was pleased to receive his answer. The Governor, who has many flatterers, will appreciate flattery only when he knows it is deserved. I have had other occasions where I found that compliments that are deserved are really appreciated by those who receive them.

Mr. Pyles—I wish to say that I have already asked a member of the Association to write, thanking the Illinois Legislature, and that resolution will be brought in, in due time.

Drones to Keep the Brood Warm.

Pres. Dadant—Until the questions come in, I have one here: "Are drones useful in keeping the brood warm?"

Pres. Dadant—There has been a discussion in the European bee-journals as to the usefulness of the drone.

Some think drones are more injurious than beneficial, and do away with them where they are not wanted for breeding; while there are men who think they should be let alone because they are necessary to keep the brood warm. I would like to have the opinion of the bee-keepers here on that subject.

Dr. Bohrer—In my experience and observation I have never seen drones hovering around or staying close to the brood. They are not very plentiful about the hive, anyhow, when the temperature is cool. There must, however, be some animal heat about them, and if they are in the part of the hive where what heat they generate will reach the brood, they certainly will be of some value to the brood. There are sometimes occasions, in the spring of the year—in April and May—when there will come a time when the brood sometimes suffers, when the bees are not very plentiful, but I never have found drones very numerous, or of a benefit to the brood, at that time. I think they are of very little value. However, if there should be a large number in the hive where what animal heat they generate will reach the brood, they certainly will be of some value; but I don't think it would amount to much.

Mr. Pyles—It has just come to my mind that there are times when drones will become a nuisance in a colony, and that would be when you have a colony—the queen failing, perhaps—largely running to drones. They then become burdensome and a nuisance; but at any other time I can't see where they do any harm. I really believe that, at times, drones are a benefit to the workers.

Mr. Moore—Well, it takes as much to rear two drones as three worker-bees. I would rather have three worker-bees for that extra heat than to have the drones. I would do away with the drones. I don't believe they are necessary in big quantities.

Mr. Pyles—There is another thing, and that is, you can't improve very much on nature. When things are natural—when you have a colony largely running to drones, it becomes abnormal. Under ordinary conditions, I don't think the presence of drones is any detriment to a colony. As much honey is stored.

Mr. Moore—In the rearing of domesticated stock of all sorts—they are in

an abnormal state today, and not in a state of nature. Man has changed their nature, to get best results. We work bees to get the best results. I don't think having any quantity of drones gets the best results. The fewer drones we have in our colonies—the fewer drones are reared—the better off the bees are, in my opinion. We have to rear a certain number of drones, but should make the effort to rear them from our best colonies for reproductive purposes.

Pres. Dadant—I write for European bee-journals. I find that a progressive man, wanting to make changes, encounters a good deal of opposition over there. This discussion of drones was raised, and I took one side of the question. I looked through a dozen different works on bee-culture, of England, France, Austria, Switzerland, Italy, and America. I found two writers who thought drones were useful; others say an excessive number of drones is injurious, and only two men who made the statement that we must destroy the drones in the poorer colonies, and increase them in the colonies we want to breed from.

I will give you my reasoning in regard to this. I am not certain I am in the right. When you breed animals—chickens—you do away with the superfluous roosters. When you breed horses, you castrate the males; you keep only a few for reproduction; you do that in all domesticated animals. Now, in the bee-business, each colony will rear from two to three thousand drones; some authors say as many as 8,000—I believe Cheshire so states. Some say that two or three hundred is a fair number. Two or three thousand does not look like an unreasonable number, when you have but one hive, but if you have one hundred colonies, you have between two and three hundred thousand drones.

Some bee-keepers say they are intended by nature to consume the surplus honey, which is possible; but if they consume the surplus, we don't get it.

Is it advisable to reduce the number of drones in each colony to a few hundred, and in colonies that we wish to breed from, rear as many as they would be willing to raise; or should we leave them alone because the drones keep the brood warm? When it needs to be kept warm, it is in the

early spring, and that is when there are no drones. I would like to have your experiences and opinions, as to whether or not the members here have noticed that drones keep the brood warm.

Mr. Stone—That is a wider field than I had any idea it was; and I believe what Mr. Dadant says in regard to it is just the thing exactly. What would be the object in letting Nature provide for itself? You want to breed from certain colonies, and you can't have the drones too numerous there. And the colonies that you don't want to breed from, you can't have them too few. I don't believe as much in letting Nature take care of itself as a neighbor of mine did. He says: "Why prune your grape-vines? Nature didn't provide that they should be pruned that way; Nature stands for reproduction, and Nature would provide for the greatest number of grapes, and the greatest number of seeds, not the greatest number of tons of grapes." He was a great man to believe in the Bible. I said to him: "You believe what the people said in the good book, about the time when the children of Israel were receiving their laws from Moses? They were commanded every seventh year to leave their vines grow undressed, and they were only to get the fruit that came from the vines those years undressed. It was an acknowledgment that the fruit was not so good when their vines were undressed."

Dr. Bohrer—Is it not believed to be good policy among all well informed bee-keepers to have as little drone-comb in the hive as possible where you expect a large production of honey?

Mr. Dadant—We are trying to have that answered.

Dr. Bohrer—You don't want many drones in the hive.

Mr. Pyles—There are a good many things coming up in this discussion since it was started. We are talking about an excessive amount of drones. I don't believe in an excessive amount of drones in any hive. You understand the position of the male in all creation; whenever there are a greater number of males than females it is out of proportion. When you find one queen in the hive, and perhaps 3,000 drones, and not over 30,000 workers, you have the colony largely out of proportion. I have gone through some little work in

the way of the drone question. I can remember the time when I didn't have any comb honey in the hive that was not built on full sheets of foundation, with as little drone-comb as it was possible to have, and I have gone down the line when they tore down part of that and built drone-comb; and I have produced more honey with a reasonable amount of drones than I did when I didn't produce practically any. There may be something about my system of manipulating. I notice that I have more drone-comb compared with what I had several years ago, and I got more honey, and honey is what we want.

Pres. Dadant—Mr. Pyles says his bees tore down the work-comb and rebuilt drone-comb; I think that is a mistake. Did you ever try to put in the hive nothing but drone-comb? If they tear down the drone-comb and build worker-comb, I will believe it, but they don't. They will either swarm out again or remodel the cells. The bees will either swarm out of the hive that has nothing but drone-comb, or will narrow the mouths of the cells and have the queen lay worker eggs in those combs. In every instance where I have followed up a statement of this kind, I have found the comb had broken down. Now, of course, it can be broken down, and also stretched, if it becomes too much loaded. That is one thing I want to inquire about. I wish every one of you who could afford to do it, would try to see if they would tear down any comb. How many drones are a normal quantity, and how many abnormal? I would like to have your opinions on that subject.

Dr. Bohrer—For the last thirty years I have been manipulating frames in hives. I have had good chances to see the interior of the hive. That question has never come to my mind, but since I think about it, I have never observed, at the time of year when we needed the brood kept warm, that there were any drones there to keep the brood warm. When the bees are gathering honey, it begins to bring the drones. There has never been a time when I have had much drone-comb, and while the number of drones they will breed every year is comparatively smaller than what it was in the beginning, there are still too many drones. I never see that they are of any use in keeping the brood warm at any season of the year. I notice when the food

stops, they begin to kill them off. They are not present at any season when they would do any good to keep the bees warm. They generally get away from the brood. I don't believe it could be held at all that they were present at any time of the year when they would be beneficial in keeping the brood warm.

Pres. Dadant—I think I must state the matter more positively. The main argument of the European bee-keepers is to leave the hive as Nature has it, they claim the drones keep the brood warm when the colony swarms—the drones remaining in the hive. A man told me that he had seven colonies of bees, and the one that had the largest quantity of drones gave him the most honey; therefore, drones helped to make honey. I said to him, "You see a number of men on the street with silk hats, and you find out the men who wear those hats are, generally, wealthy; is it the hat that makes that wealth, or the wealth that makes the hat?" My opinion is that the drones are the result and not the cause, so far as the product is concerned. A strong colony will produce a certain amount of honey, but I hold that that colony will produce just that much more honey if it has less drones; two drones certainly consume as much as three workers.

Mr. Moore—There is another point brought out from the discussion. The queen as a matter of relief from laying worker eggs lays at certain times drone eggs; she becomes tired and lays drone eggs.

Mr. Kildow—Is that not more of a theory than anything else?

Mr. Moore—I don't think so.

Pres. Dadant—Dr. Miller called my attention to the fact that bees will leave the drone-cells empty when the queen hunts for drone-cells.

Mr. Moore—I have had cases where the queen went up in the sections and laid half a section of drone-comb.

Mr. Kildow—Is that not on account of not being the right time of year, or because the queens think they must look out for the future?

Mr. Moore—No, not in this case.

Mr. Kildow—I think a colony that swarms out, and has a lot of drones to take care of, doesn't amount to a great deal. I can't see why the drones do any good. Very often you will find the drones in one corner of the hive.

Mr. Pyles—Did you ever go out to the hive and lift out the comb, and find the drones on that comb—were they down in the corner all by themselves, or scattered among the bees?

Pres. Dadant—It depends upon the weather. They are often crowded in the corner.

Mr. Pyles—I have known of the bees tearing off part of the comb when they need it. They have taken the wax and moved it from one place to another, so why could they not tear off part of the comb?

Pres. Dadant—You believe they do tear down comb?

Mr. Pyles—I believe they take wax from one place to another, and, when they need it, they build it in there as drone-comb.

Pres. Dadant—I don't think they ever tear down comb for that purpose.

Mr. Baxter—While it may be true that colonies that produce a great deal of honey, sometimes produce a great many drones; it is not universally true, because some of the colonies from which I got the largest crops I ever had, had very few drones. In 1883 I had an apiary of forty-one colonies that produced 12,000 pounds of honey. I had as few drones as ever I had at any season, and one was a colony that I had just taken a great deal of drone-comb out of, and had left nothing but worker-comb. The question is, is the drone-comb beneficial, and should it be permitted? I don't think so. I think the drones are at all times objectionable; and if we rear drones, we should rear them from our best colonies for breeding purposes, but make them few.

Mr. Stone—Would you recommend having drone-traps to catch the drones?

Mr. Baxter—No, sir. What is the use of that? Avoid breeding them. The drones can be of no detriment, although they are of no benefit.

Mr. Stone—They are eating the honey all the time.

Mr. Baxter—Not much of it.

Pres. Dadant—Here are some questions on the Foul Brood law—would you rather have them, or hear Mr. York?

Mr. Stone—I would suggest that we hear Mr. York after dinner. Here are a couple of questions from Dr. Miller in the Question-Box:

Pres. Dadant—Dr. Miller says: "The temptation to go to Springfield is very strong. I would have a fine visit with Mr. York on the way, and I would enjoy very much meeting you and other good friends. Indeed, I have sometimes been almost persuaded to think I would undertake it, but, on the whole, I doubt if it would be prudent. But I would like to be there."

Single-Tier Or Double-Tier Shipping-Cases.

"Is it better to have shipping-cases single-tier or double-tier?"

Mr. Kildow—I have noticed the Colorado people go in mostly for double-tier.

Mr. Dadant—Altogether now.

A Member—For the life of me, I can't see why they do. I can't see that it looks any better than mine. I am decidedly in favor of flat single-tier case. It is only a matter, it seems to me, of opinion in regard to that shipping-case business.

Pres. York—I think the double-tier case may be a little stronger, because a little more compact. In handling single-tier cases, they seem to be weaker; being spread out so makes them thinner. I think you can make a stronger case in the double-tier. There is one objection: Unless you use corrugated paper between the two rows, if a section should break in the upper tier, it would run down; so in that way the single-tier would be cleaner. I believe the double-tier is a little stronger. I believe in having almost the double amount of glass; it shows off more of the honey. But that would be a detriment unless your honey was extra good.

I saw a double-tier case from Utah last week; in fact, I took a picture of it to use in the American Bee Journal. It was practically all unsealed sections; scarcely a whole sealed section in that case. It seems to me that a bee-keeper should be fined for putting such honey on the market. Some sections were not half full of honey. Several hundred cases were shipped from Utah to Chicago, unsealed; culls, simply. I had the case in my office. I don't know what they are going to do with it. No grocer would buy honey in that way.

It seems to me the double-tier shipping case would be a little safer to

ship, and to handle, than the single-tier, although I think the single-tier is more easily filled, and has its advantages, also.

Dr. Bohrer—I notice that men, in handling packages, the heavier they are the more roughly they handle them. My impression would be that there would be more broken sections where the package is heavier than where it is light.

Mr. York—There would be the same number of sections in either the single-tier or double-tier.

Dr. Bohrer—I have had no experience in packing that way.

Mr. Stone—I would suggest that we take a rising vote. I would like to state what some one said who ships honey in car-load lots, in large quantities. He says in the Eastern market those double-tier cases sell more readily than the other. You take a long case; a man steps on it and cracks the sections, and with the others they don't.

Mr. York—Why should any man want to walk over a case?

Pres. Dadant—They do on the train, or in the stores, to reach something.

Mr. Kildow—As I came through Peoria, I stopped and saw a shipment of Colorado honey that was to go to some neighboring towns. They had four or five cases stacked up with a piece of board on each side; had another with five cases, or four, and two others had three cases, each nailed up straight. A fellow might just as well step on a flat case as to send it that way; the jar of the train would tip this over. Folks ought to know better than to ship honey in that way the same as they ought to know better than to step on a case of honey. I said to myself that that honey would get smashed the first time that engine starts. It seems to me in reply to Mr. Rauchfuss' statement, that Colorado honey sells better in double-tier cases—that the reason for this is, there is more Colorado honey sold in double-tier cases because that is what they use out there. I don't know why they do, unless it is because they are stronger and more compact. I should think that would be more of a reason than because men stepping on the other cases; a man stepping on a case would be an exception. I can readily see why Colorado honey would sell better in double-tier cases—because it

is put up that way. I never saw any Colorado comb honey put up in single-tier cases; it has always been in the double; they have adopted that way of shipping. The same as do the Western people put their apples up in boxes, while the Eastern people use barrels. The Western apples are all put up in boxes, and Colorado honey is put up in double-tier cases; the Eastern people using mostly the single-tier case. It is a matter of locality, and appearance. If it is good honey it will sell any way.

Mr. Stone—I believe the bee-keepers, the railroad men, and the commission men, and all those interested parties, should learn by experience which is the best. I have seen lots of bananas shipped, and the men walked right on them. They were employed, and didn't care. You know what the Bible says about the laborer in the field—because he is a hireling he doesn't care for the life of the sheep, and when the wolf comes he flees. The banana men have gotten to shipping their bananas in sacks; a lot of bananas come into the market green, and those fellows walk all over the bananas and consequently bruise them. They ought to be allowed to ripen and get black without having been bruised.

Mr. York—Suppose you were going to buy a lot of honey from a bee-keeper who has honey in both double-tier and single-tier cases, and it is all as fine as Mr. Coppin's, would you buy it because of the case, or the honey? I don't think it would make a bit of difference what sort of a case it was in. I go to a wholesale dealer for honey—he has honey for sale; I want the honey; I don't stop to see what kind of case it is in. It seems to me there is "nothing in it," except perhaps for handling where they ship in carlots, but I doubt if you will get any more per pound for the honey if you have it in a double-tier than in a single-tier case.

Mr. Stone—What kind of a case, if you know, does Dr. Miller use?

Mr. York—I sold him about 1,500 cases one year and they were all single-tier, 12-lb.

Mr. Stone—We got double-tier at the time of the World's Fair.

My Pyles—I came through Peoria and stopped at a commission house and saw a carload of Colorado honey, double-tier cases without one broken section, and they were even so good

that the bottom fell out of one case and the honey fell on the floor and not a section was broken.

Mr. Coppin—About the time of the World's Fair we nearly all used the double-tier cases, but I have long ago abandoned the double-tier cases, and I understood nearly all Eastern people had.

Mr. York—Why do you like a single-tier?

Mr. Coppin—If there is any leakage of honey—which there is once in a while, no matter how careful you are—there is more danger of spoiling the sections in the double-tier than in the single. In the double case we have not got the lower chamber to catch the drip like in the single-tier, and that is why I prefer the single-tier, and my honey is nearly all put up that way.

Mr. York—Mr. Pyles said this case down at Peoria had the bottom drop out and the honey was not injured; the reason they didn't break, it seems to me, was not because they were in a double-tier case, but because they were better filled; the case could not save the honey.

Mr. Moore—It might be it was the drones in one section that saved it!

Mr. York—May be the drones down in one corner kept it warm!

Mr. Pyles—If you say appearance has nothing to do with the sale of the honey, why not get any kind of a section?

Mr. York—You said that case came all the way from Colorado; I saw a carload of single-tier cases of honey that came all the way from California and it was all right.

Mr. Moore—I think it is simply a matter of opinion.

Pres. Dadant—As Dr. Miller asks the question, possibly it would be well to take a vote upon it.

Those in favor of the single-tier case rise—nine; those in favor of the double-tier case rise—four.

The convention then adjourned until 1:30 p. m.

FIRST DAY—AFTERNOON SESSION.

The convention was called to order by Pres. Dadant at 1:30 p. m.

Pres. Dadant—The first on the program this afternoon is the paper of Mr. Moore, on "Foul Brood."

Mr. Moore—When I received a letter from Mr. Stone saying the committee wished me to give a paper on "Foul

Brood," I hesitated before answering in the affirmative, because I felt that there were several men who were better qualified, and knew more about this subject than I, but I thought I would do the best I could.

Foul Brood.

The subject of foul brood has been pretty well talked and discussed in our meetings, and in articles in our bee-papers, so that a good many of the members think that too much time has been used on the subject; but when we consider that foul brood is the greatest menace to the bee-keeping industry today, don't think that we can spend too much time in discussing ways and means of controlling this disease. I think that it cannot be too thoroughly discussed or understood.

There may be some here that are not posted, or have not inquired, as to the origin of the disease—what it starts from. And some may not be here, but who will read this report, and there should be a little information for them.

The bacillus of foul brood starts from a spore of a vegetable nature similar to mould that comes on fruit. This spore is fed to the young larvae in the honey, and soon develops into bacilli. These bacilli reproduce themselves by dividing and subdividing until they become almost innumerable in the body of the larvae, and eventually produce death. Upon the death of the larvae these bacilli develop spores which will produce disease in other larvae when fed to them.

This larva, after it dies, and dries down, turns to a light brown color. Most of you are familiar with the description of it, if you have ever seen it. It is similar to the color of coffee with cream in it—a light brown color, of a gluey consistency. It will stretch out, by using a toothpick, to about an inch or more. It dries down to a dark mass in the bottom of the cell, and adheres thereto, and cannot be gotten out without tearing the cell-wall down.

The spores of foul brood are very hard to kill. They have been placed in a 5 per cent solution of carbolic acid for twenty-four hours without affecting them; they would still live and develop; also in a 1-1000 per cent solution of corrosive sublimate, without effect.

Mr. France reports having exposed foul broody honey to a temperature of

20 degrees below zero, for either ten or fifteen days, and when that honey was fed to healthy larvae it developed foul brood. The only way to kill the germs is by extreme heat. Heating honey to the boiling point, and keeping it there for at least thirty minutes, seems to be the only way to destroy those spores, and it is then generally safe to feed the honey back to the bees.

In American foul brood, the larva very seldom dies until after it is capped over, though occasionally you will find them dead before being capped. The cappings appear sunken, with small perforations through them. The bees in time will take those cappings off and try to clean out the cells to use the honey stored in there; if the eggs are laid in that cell, they become infected, of course, with the spores.

In European foul brood—although I have had no experience with that, and have not seen a case of European foul brood—from the reports I have learned that the larva dies at an earlier stage than in American foul brood—almost always before it is capped over it turns a yellowish color at first, and gradually gets darker and dries down into the lower wall of the cell, according to its position, in a dry, brownish scale (a watery mass). It does not stick like American foul brood, and can be easily cleaned out.

In the American foul brood there is considerable odor, likened to the smell of an old glue-pot, but I don't think I ever smelled a glue-pot that had the smell of a bad case of foul brood. In European foul brood there is also some smell—there is a sour smell attached to it, as I understand it.

As to the modes of treatment: The one that I always recommend to the ordinary bee-keeper, for either a case of the American foul brood or European, is the McEvoy treatment, of brushing bees on a foundation and destroying the old combs—either destroying the honey, or boiling it so as to render it safe to feed back to the bees.

With the European foul brood, the Alexander method of re-queening, and also the Baldrige plan, have been used in both cases with good success by some, and others have reported failure.

It seems to be the general opinion that the infusion of yellow blood tends

to keep the disease under control; yellow bees seem to be able to fight it; they are hardier.

You can clean it up at one time, and maybe a few months after, or next season, it will re-appear. I think, if anything, the European foul brood is worse than the American.

The main point in cleaning up all cases of foul brood is to destroy, or render innocuous, honey that is infected, so that none of those spores can be carried and fed to living brood. In case there are a few cells of foul brood in a colony, the bees, in traveling over and trying to clean it out, are liable to carry the spores to other cells, and thus spread it, and if any honey is spilled in the operation of cleaning, the bees are likely to carry it in, and you can't tell where it will go.

One great point in the control of foul brood, I think, is going to be in the better education of bee-keepers and the people at large, but bee-keepers especially.

Most of the bee-keepers—those who are progressive—attend these conventions, and if they cannot attend the conventions, they can read the reports, so that they can tell of the appearance of foul brood from reading. The healthy brood is always of a glistening pearly white color, and anybody who has handled brood very much should be able to tell at a glance if there is disease. You can tell by the appearance of the cappings—if they are smooth and nice, it is all right.

If we would use our eyes and brains in cases, we could any of us diagnose a case of foul brood.

The first case I ever saw—I knew what it was at once. I had read descriptions of it in bee-papers, and I could tell at once that it was foul brood. I think that any one can do the same thing, and if bee-keepers all over the State—those who are progressive—would pay more attention to this, we could soon get it under better control.

We should each of us—as a matter of selfishness, say—go to a neighboring bee-keeper and explain this matter to them. You take our farmer bee-keepers around the State, they know but little about bees; explain to them the foul brood question; ask them to allow you to examine their apiary, and assure them that you will tell them

whether or not the bees have foul brood, and this may be a protection to your own bees.

Then, I think, one thing that we should do in this matter of education, is to use our influence to make bee-keeping a branch in our State University, so that it will be taught there. Get a good man to take charge of a State apiary, and have that under State control. Have some practical bee-keepers give lectures; some one who can teach these farmer boys that go there; and, although it would be in the winter time, they can get information on lots of these things, and when they go home to their farms, they would take more of an interest in the bees they have there, and would take pains to get things in a better condition; and they would also be able to distinguish whether or not they had any foul brood, and be able to clean it out if they had it.

If any one has a case of foul brood that he is doubtful about—if you have some dead brood in your hive, and you are not able to diagnose the case—send to Dr. E. F. Phillips, Washington, D. C., a sample of that brood in a tin box, and get his opinion on it. There is no expense attached to this, and, upon application, he will forward a franked box in which to send the sample.

Our State laws, as we now have them, I consider to be very good in most respects, although there are some things that could be changed. Most of the states have laws—some are good and some indifferent. What I would like to see would be a law passed by our National Congress on this bee-disease question, so that we could have uniform State laws on the control of foul brood, and especially controlling the shipment of foul broody bees and appliances; put it in the hands of the Interstate Commerce Commission, so that they could look after it, the same as they do the livestock and other things. I think this would be a mighty good thing for us. I am told that they have a few colonies of bees at the State University which are in a very poor condition; in fact, some one stated he thought the bees were infected with foul brood. It is a disgrace to the bee-keeping fraternity of the State of Illinois to have such a condition exist in an institution of learning.

There are plenty of bee-keepers in

the State who are fully competent to go there and give instruction on bee-keeping and on bee-diseases.

With reference to the inspection work and the foul brood question, I think it has been rather up in the air the last year. Under our new law the inspector hardly knew what to do, but when we consider the amount of foul brood there is in the State of Illinois, and the limited amount of money at hand, and the few inspectors that can be put into the field, it looks as if it was going to be a pretty hard matter to control it without individual effort.

For my part, I take particular pains in talking with any of my farmer friends who keep a few colonies of bees, in regard to these bee questions, and especially bee diseases. It is a matter of selfishness on my part. I don't want foul brood, and if I can go and look over their place and find that any of the colonies are diseased, and I can help them clean it up, it is good policy. If we would all do our part it would not be long before we would have it under control.

Pres. Dadant—The question of foul brood is now open for discussion. We would like to hear the ideas of those present on the suggestions made by the gentleman who has just spoken. However there are two questions here, if you wish to treat them at the same time. They both relate to this subject:

1. Would it be advisable to ask the legislature for any radical change in our foul brood law in the near future?

2. What, if any, changes should be made in our foul brood law?

Dr. Bohrer—I was very much interested in the remarks in the paper that Mr. Moore read. I think he has struck the key-note in several parts of his paper. We want more education upon the subject. I have a lecture to deliver next week at the Agricultural College before the students on the subject, "The Hive and the Honey-Bee."

Mr. York—You ought to give each of them a copy of Langstroth's book, "The Hive and the Honey-Bee," revised by Dadant!

Dr. Bohrer—I will recommend that. I have said repeatedly that the books by Cook and Langstroth are the best standard works in this country. I will recommend them before that class in Kansas, in the lecture that I hope to deliver there.

Our law in Kansas is a little different

from yours; it is very much like that we recommended here last year. Dr. Phillips and I were selected as a committee to get something up; I formulated a bill that is a little different from yours.

I want to say that theoretical education is not going to make practical bee-keepers, nor persons who can be sent out to diagnose and successfully treat foul brood; it will not do at all; we want practical education along these lines. I am going there to tell them plainly what should be done, and to advise them to have an apiary right there on that Agricultural college farm, and to have practical demonstrations made through the honey season—teach the students what foul brood is, and talk to them concerning the matter of transferring the bees from box-hives. The standard Langstroth hive is more in use than any other hive in the world.

My experience has been very similar to that of Mr. Moore's with regard to the diagnosis of foul brood. I never saw it until some five years ago. I was well acquainted with Mr. Langstroth, and talked with him on the subject; I also had a conversation with Mr. Rood, of Michigan. It was at the first National Convention, held at Indianapolis; his treatment was very similar to that which I have found necessary to adopt in stamping it out of my apiary. Two or three times I have thought I had it cured, and it would show up. I won't treat a colony in my apiary except in this way. If there is a honeyflow coming on I brush the bees off into another hive. If it is a colony worth saving, or if two or three have got to be treated, I will not try to save either the comb or the honey. I took the contents of four or five hives last spring—about eight or nine o'clock in the evening, about the month of April or May; I took the contents of all of those hives, after brushing the bees off of them and put them on a brush-heap, and I put fire to the whole business—comb, honey, brood and all—the whole thing. The next morning I put kerosene into every one of those hives and set fire to them.

McEvoy says that it is not necessary to disinfect the hives, but I think it is just possible that in some nook or corner there may be a little mite of honey secreted, or deposited there, that the bees might reach, and then you will

have foul brood again. It costs but a very little to put kerosene in a hive and set a match to it. Just drop the match in carefully and then stand back. The first time I did it I had my whiskers burned in the process!

Mr. Wheeler, of Chicago, says, treat it as you will and it is bound to reappear again, but that is not true, if it is stamped out.

Mr. Rood said that the most effective plan he had found for treating foul brood was to dig a hole on the level ground near the diseased apiary, and after making a fire in the pit, burn the diseased combs and the frames, etc., and then put the earth back in the hole to cover it all up—just fill up the hole.

That looks like a loss. I lost several hundred pounds of honey by burning it up; but I did a great deal better doing this than if I saved it. Be as careful as you may, if you don't burn it, the bees are liable to get a drop of honey and carry it with them, and, when you least expect it, you will find you have a return of the disease; I don't want to take any chances whatever. I will destroy the entire contents of the hive every time I have to treat it, if necessary, and if late in the fall, I won't try to save the bees.

We have a Samson on our hands—there is no question about it. It is the greatest menace to the bee-keeper that I can call to mind. Aside from this, it may be considered a great source of consolation and of satisfaction to the bee-keepers of the United States that in the matter of legislation the States of Ohio, Indiana, Illinois, and Kansas, have all passed foul brood laws within the last five or six years. Your law may not be perfect—I don't think that it is.

I don't know what these men at the Agricultural College at the State University are going to do, whether they will make bee-keeping practical or not. They must take these young men—select boys that are solid, square-shouldered, well built fellows, boys that mean business, and educate them—teach them what it is to be stung by a honey bee. Give them practical lessons, and then send them out among the bee-keepers, and they will talk sense to the farmers.

There is another method of getting rid of this thing. I won't sell a colony of bees to a farmer or one of my neighbors. They bother me more than the

bees are worth. They can't handle them; foul brood gets among their bees, and they get into trouble in one way or another. They don't know how to care for bees, and foul brood is in evidence, and I would rather they would not have bees. If they come to me and want to buy a colony, I ask them, "Did you ever read the standard works on bee-keeping?" and they answer me, "No." "Did you ever read the bee papers?" "No." "Then you would better never keep a colony of bees."

These are matters for us to take into consideration.

We like to sell our bees when we can spare them, but I don't want them to go into the hands of some one who knows nothing about them, and in all probability get foul brood, and have it return to me.

I am taking up too much of your time. I came here more to help you rejoice over the victories you have won, because I consider you people in Illinois have won a great victory. I don't know whether I will ever come back here, but I hope to come back; I like to get among your people who talk about these stinging insects. You are going to be a source of information to the people of this country. I believe the United States is going to be the greatest honey-producing nation in the world.

It is not every one that can make money out of bees, but there are a few that can, and I want the few to have the opportunity.

I know a number of ladies who have a few colonies of bees, and they bring them in \$5.00 to \$15.00. Miss Candler takes care of her old father and mother, up in the 80's, and handles over three hundred colonies of bees.

Honey is one of the most wholesome sweets there is in the world. You won't find any man in the medical fraternity but what will take the stand I have on that subject; and in the treatment of the white plague, in special institutions to treat that disease, you will find that they advocate there is no other sweet that will take the place of honey.

Mr. York—Will it be necessary in two years to bring the question of a Foul Brood law before the Illinois Legislature, or does the present law stand until it is repealed?

Mr. Moore—The law will stand until

it is repealed—as far as the Foul Brood law is concerned, and the Inspector. The appropriation has to come up each session. We will have to look to it the next session* of the Legislature, a year from January; the appropriation for paying the Inspector is not included in the Appropriation Bills.

We will have another season to try out the foul brood question, and we will know pretty thoroughly how it is going to work out, and whether or not any changes will be desirable to have made in the law. If there are such changes deemed advisable, we can formulate them at the next convention, and appear before the Legislature in plenty of time.

Dr. Bohrer—The Foul Brood law you have now, I believe, will work pretty well for the present, because you folks here have more experts in bee-keeping than we have in Kansas, by far. It is difficult for us to find competent men to act as bee Inspectors. With us it may be necessary to have the law changed, and you may want this law changed, and to get your State and colleges to work to educate young men and women on that subject.

Mr. Baxter—We have to wait another year before we can have the law changed. My opinion is, we have one of the strongest laws in the United States on foul brood. We have a provision in this Bill, declaring the keeping of foul-broody bees on your premises as a nuisance. We didn't have that in our former Bills. I think the provisions of this Bill are very strong, and I think you will have no trouble in working it out. I think, after we have tried it out a year, we won't need any changes, unless it be required in the paying of expenses of Inspectors. We are weak on that point; but so long as we have an appropriation we can pay it out of that, and see how it works.

Mr. Stone—I have yet to see the weak point in our law. We got exactly what we asked for, and I can't see anything that we lack in it.

Mr. Kildow—I don't see that there should be very much change yet; at least not for the present, or until we get a little more of an insight into it, and see what we are going to need. There is only one weak point, as it looks to me. There is no money for paying the expenses of the deputies;

the money comes from the \$1,500 to pay the per diem of the deputy, but there is no provision for paying his expenses. I think our law is a very good one, and, as Dr. Miller says, "It has got teeth in it."

Mr. Dadant—There was some statement made in regard to obtaining National uniform laws throughout the country. I would like to have the opinion of the members upon that. Can we obtain uniform laws from the States, or will we have to go to the United States Government to get uniform laws?

Mr. York—Would that not be something like the Pure Food law? We have a National Food law, but that applies only to Interstate Commerce; then the States have to have laws in line with the Federal law. The National Food law applies only to Interstate Commerce.

Pres. Dadant—Then it is impossible to have uniform Foul Brood laws for all States?—

Mr. York—That is the way I understand it.

Mr. Baxter—The Supreme Court rendered a decision the other day, that the State Commissioners, Railroad and Warehouse Commissioners, were powerless in fixing State rates. That no matter what the transportation was within the State, it always applied to Interstate Commerce, and that it was a question for the United States Commission; and if that point is good, and if it holds good, and it must, it would apply to everything; it would do away with the State Commissions, and with the State Food Commissions. and everything would be under the general Government.

In our particular case, this relates to the criminal side of it—a nuisance; and I don't think the National law would apply at all.

The horticulturists have been trying to get a National law for years for nursery inspection, because the State inspections are a farce. What they will not allow to be sold in their own State, they will allow to go out and be sold to others. They have not been able to get the National Government to recognize it as advisable. I think we can't get a National law on this subject.

Mr. Stone—The question was up on the whys and wherefores of the Act making an appropriation for the Illi-

nois State Bee-Keepers' Association. It reads this way:

"Whereas, the importance of the industry to the farmers and fruit-growers of the State warrants the expenditure of a reasonable sum for the holding of annual meetings, the publication of reports and papers containing practical information concerning bee-keeping; therefore, to sustain the same and enable this organization to defray the expenses of annual meetings, publishing reports, suppressing foul brood among bees in the State, and promote the industry in Illinois:

Section 1.—Be it enacted by the people of the State of Illinois represented in the General Assembly, That there be and is hereby appropriated for the use of the Illinois State Bee-Keepers' Association, the sum of one thousand dollars (\$1,000) per annum for the years 1911 and 1912, for the purpose of advancing the growth and developing the interests of the bee-keepers of Illinois, said sum to be expended under the direction of the Illinois State Bee-Keepers' Association for the purpose of paying the expenses of holding annual meetings, publishing the proceedings of said meetings, suppressing foul brood among bees in Illinois, etc."

Mr. Stone—Can the Attorney General keep us from spending what money we want to for the extermination of foul brood under a law like that? This law we have had every year since the publishing of this Report. This is the tenth.

Pres. Dadant—What we are trying to discuss now is whether we can have a general law from the Government—a National Law?

Mr. Stone—Some one suggested they might repeal this law. Then the question comes up—can we pay the expenses of an assistant foul brood inspector out of our State appropriation?

Dr. Bohrer—Might not congress be asked to require every man who takes bees from one State to another, or sells queens, or ships honey, that he get a certificate, certifying it is entirely free from disease?

A member—The National Government might pass a law that before such property was moved from another State a certificate would be required.

Mr. Kildow—How long would that certificate be good?

Mr. Baxter—Until he got into the State.

Mr. Kildow—I might visit a man's yard tomorrow, and pronounce his bees clean, and two weeks from that time his bees might be diseased. But he has a clean bill of health! It is a pretty hard thing to give a bill of health for bee inspection.

I would not give a man a bill of

health, except for a short period, because I can't do it. His bees may be affected in less than a week, but I have had to give him a clean bill of health, and he can come back on me and say that I gave it to him all right.

Mr. York—As I understand it, when you give a certificate of that kind, it applies only to the day you are there. You can't give me a certificate stating that I will have no smallpox in my house for the next ten days, I don't see how you can make a certificate cover any time in the future.

Mr. Pyles—Would it be advisable to have the national government pass some uniform law? The government can refuse to allow the manufacturer to ship an impure article out of the State, but they don't interfere with shipping it into the State. We can sell impure honey in this State, but we can't ship it out; and neither could we if the national government passed anything in the way of a foul brood law, and prohibited shipping diseased bees from one State to the other—that would not interfere with the selling of impure honey in our own State, unless our State law interfered.

Mr. Moore—If the United States government would adopt a law on this interstate shipment of honey, and so on, it would tend to get more uniform State laws.

You take a State that has no law in regard to the shipping of foul brood, or the control of foul brood, it is difficult to curb it; but if a man had foul brood and he wanted to ship his honey into a neighboring State, and that honey was stopped—it would soon get indifferent bee-keepers interested, and they would get a foul brood law for their own State, and in that way it would help. It would simply be a matter between the States. The government has no control of the shipments in each State; that is a matter that the State laws control.

Pres. Dadant—The thing I was trying to get at is this: Whether or not a law passed by the United States government would be advisable—not as things are, but as they might be. We are too much accustomed to thinking of our present system as perfect. One State says that a young lady may be married without asking her parents' permission; if she steps a few feet across the line into another State, her rights are entirely different. Is

that right? If each State has the right to make its own criminal laws, then I think we cannot change it; but if that is wrong, I think there is a way to get uniform laws without having to ask each legislative body.

We have this year succeeded in getting a law; we don't know but two years hence we cannot. Is it not necessary that we should have uniform laws?

Mr. Moore—This question of State rights has been a fight all through the country: it was one of the causes of the War of the Rebellion, and that is insisted upon too much today. Each State has the right to make its laws, and I think that, in a country the size of this, and as closely connected as are the various States, there should be uniform laws covering the different States, and the sooner we can get to that idea the better it will be for the entire country.

Mr. Baxter—It is advisable, but under our present Constitution we can't do it.

Mr. Dadant—If we don't discuss it, we will never get it, and never get to it.

Mr. Baxter—It seem that progress is being made all the time; although the people themselves cannot get what they want, the Supreme Court is gradually doing it. The decision of this Warehouse Commission is a big thing in advance. They are getting at the point. But for the present it is impossible to get the uniform laws we desire.

Pres. Dadant—What I am aiming to do is to draw the attention of our bee-keepers to this matter. At present the conditions in the United States are such that they should be remedied. We have to spend too much time getting down on our knees and asking for State laws. Look at the condition that exists with reference to weights and measures, a bushel of oats being different in one State than it is across the line in another State. There are things that ought to be governed by the local authorities, but there are also others that should be regulated by Federal laws. I want to discuss this here, and let us each think it over, and put forth our best efforts to get this condition corrected.

See the people going out to Nevada when they want to get a divorce. Why, isn't that a shame? We want to

change--those things. We want to change this matter of Foul Brood laws. At any rate, I believe it is never too soon to speak about these matters. We cannot change them within the next year or so, but we want to think about them, and then we will be able to get at the matter sooner or later.

Mr. York is to address the meeting on the changes in the Constitution of the National Bee-Keepers' Association.

The National Bee-Keepers' Association.

Mr. York—I suppose most of those present are members of the National Association, and have seen the new constitution as it appears in the Forty-Second Annual Report issued by General Manager France.

The new constitution appears as it was approved at the Minneapolis convention last August. It is now being submitted to the membership throughout the country, and is being voted upon. The polls close a week from today. The next day the votes will be counted, and we will then learn whether or not the new constitution has been approved.

It provides for a great many changes from what we have been used to for the past number of years.

I remember as far back as perhaps twenty years, or maybe twenty-five years, when Mr. Newman, the then editor of the American Bee Journal, also a prominent member of the National Association, tried to get the Association to change to an affiliated body. This new constitution provides for that. Some ten years after that, another effort was made to get the Association to adopt an affiliated organization, but failed, and it seems to me the time has come now when we might safely try the new plan, and if the new constitution is approved by a majority vote of the membership this month, of course that will be done.

I don't suppose every member of the Association will approve of it. Personally, I think that the new constitution, if it is approved, will give the National organization an opportunity to do some things which it has not felt it could do heretofore, or at least has not undertaken.

It provides for five directors instead of twelve. I think there is no question about that being an advantage, in view of the fact that it is almost impossible

to get twelve people together, scattered as they are over the country, and it takes a long time to hear from each one by mail; to get a majority of them to agree, it takes a lot of correspondence. So if we can have the number of directors reduced to five, they can get together more easily and have frequent meetings, and the organization can be run more as a business organization. All the discussion at Minneapolis tended that way. What the National should be is more of a business organization instead of simply a social gathering, as it has been for a number of years.

There will be four officers, I believe, in addition to the five directors.

This new Constitution provides that the President shall preside at all meetings of the whole body, as well as of the directors. I don't remember why it was put that way, unless it was thought the President should be in touch with everything that is being done by the directors, as well as the annual meeting.

The new annual meetings will be made up of delegates, if this new Constitution is approved—one delegate from each local organization.

Pres. Dadant—Is it not for every fifty members?

Mr. York—One delegate from each affiliated association, but he will have a vote for each fifty members or fraction thereof. Most of the organizations would not average more than seventy-five members. If any local organization wishes to have anything done, they would, of course, advise their delegate to bring it before the annual meeting, and have it discussed and voted upon, and if a majority of the members thought it a good thing, it would be approved and followed up.

Some have thought the meetings would be only of delegates. There is a provision in this Constitution, where the sessions of the annual meeting shall be open to the attendance of any one who wishes to come into the meeting.

It is not going to be what we might call a "closed corporation," but an opportunity for local bee-keepers as well, to go into the open meetings and take part in the discussions.

Dr. Bohrer—Is the program to be made out previous to the meeting?

Mr. York—They could discuss special or general topics as the Board of

Directors may decide upon. Questions may be sent to the Board of Directors, the same as questions are sent in here, and then the Board of Directors would bring them up.

Dr. Bohrer—Would that do away with the Question-Box?

Mr. York—I should think not. Every member in the open meetings would have an opportunity to ask questions.

The meetings heretofore of the National have been mainly local. We would meet, for instance, in Harrisburg, Pa., as we did one year, and nearly all those in attendance were from around Harrisburg. One year the National met in San Antonio, Texas, and nearly all those in attendance were from around San Antonio, or from Texas.

Now, if we can have a **delegated** body, we will have representatives from all parts of the country, and they can discuss conditions that affect the whole country, so far as bee-keeping is concerned.

I think it will be more truly a meeting national in character than it has been heretofore.

Another thing some thought it would be well for the National Association to do, was to sell and advertise a market for honey. It may not be that they will be able to start a brand right away, but in the State of Michigan, the State Association has been used to help the members to sell their honey.

Mr. Tyrrell, who is the Secretary of the National, and also of the State Association of Michigan, has a good many ideas along the line of helping members in the marketing of their honey, and, no doubt, some of those could be tried out if this new Constitution is approved.

It may be that you will have some questions to ask, and I will be glad to answer them, if I can do so.

This new plan of the National should be thoroughly discussed by every local association. If it is a success, it will be a success because a large majority of bee-keepers are in favor of it.

There is one point, it seems to me, that would have to be changed, or we would not have any National organization. And that is the question of dues. I get it direct from the General Manager, that after paying the expenses of the year in the way of

getting out reports, sending out bulletins, etc., there is nothing left in the treasury to pay his own salary. That, of course, will never do. Mr. France is the man who has done more of the real hard work for the National Bee-Keepers' Association than any one-half dozen other men, and for him not to receive any of his salary certainly would not be right.

It simply shows that 50 cents dues are not enough to cover the legitimate expense of the National Association.

The new constitution provides \$1.50—50 cents to be retained for the local organization, and \$.1.00 to go to the National, and that will give them almost double the money hereafter, for the majority have been coming in through the local association at one-half rate, or 50 cents a year.

The Annual State Report I have before me is really a larger report than the one issued by the National Bee-Keepers' Association. I was looking over this today, and it seemed to me it is one of the most complete and valuable publications in the bee line that any organization in this country has ever put out. I hope every member will read it carefully. It contains a great deal of first-class information on the subject of bees and bee-keeping. I think it is a great credit to the State of Illinois, and to the officers of this Association—to Mr. Stone in particular, who compiled the work and who had charge of getting it out.

The new constitution may not be adopted, and if it is not, that will end it for the present, and the National will go on under the old constitution until such a time when a new one may be adopted or the old one changed.

Personally, I think it is a good thing to have a change once in a while, and have a new plan to work under.

We are not going to make any progress unless we experiment a little, and try something different; we don't know whether or not the changes will work for good until we try them, but I hope this constitution will be approved.

I am sure we only want what is best for the National Association, as well as for the smaller State and local organizations.

Mr. Stone—I had made up my mind to vote for the new Constitution, and when I considered the whole matter I could not do it.

There is one point I believe there will be some trouble about in Section 2, Article 4: "Whenever a local beekeepers' association shall decide to unite with this association, it will be received upon payment to the local secretary of \$1.00 per member per annum to the Secretary."

"The local association will come into the National at \$1.00 each, and 50 cents to go to their local association. Here is the trouble: "All active members of such association must become members in order to take advantage of this provision."

We have a great many members that I know won't pay a dollar to join the National. That will cut the whole Association out. It will mean a reduction in the Illinois Bee-Keepers' Association, or else we can't join the National. That is just as sure as black is black, and white is white. If we have to raise our fees—I don't object; I would pay my dollar to the National, but I know there are others who won't do it. If that was stricken out, I would vote for the new constitution; with that in, I could not. I voted "No." The Chicago-Northwestern won't live three years after that. Last year they fell short 26 from what it was the year before, and it was only for the reason that they had increased their fee to \$1.50.

I don't see how the Chicago-Northwestern can do it. They can't get along with less than \$2.00. If they join the State Association, and have to pay \$2.00, won't that Association, Mr. York, be cut down twenty more members next year?

The Northern Illinois and Southern Wisconsin Association have already sent in their fees for next year—14 members—last year it was seventeen. They have cut down three, which is because they are paying fifty cents instead of twenty-five.

I have had letters from men saying, "Will you explain to us the benefit we are going to get for our dollars?" I tell them what benefit they are getting by being protected by the National; that they are getting the reports from the three associations; that it cost \$1.01 last year to publish the report; and they send back their dollars; they say if it had been over a dollar we would not have done it.

Mr. York—As I understand it, the new constitution would not go into

effect until January 1, 1912, if approved. All associations getting their dues in before that time would join under the old rate, so that objection would not apply this year.

Mr. Stone—Supposing that we send out our notices in December, or just as early as we can get them out, we can warn them that every one that joins before January can get in for \$1.00; then some will join after that, and we can't go into the National Association and leave these men out. They have to cut off that clause.

Mr. York—That has to stand for this reason: It has been proven that the fifty-cent rate is not enough.

Mr. Stone—Cut out the clause where it compels the whole association to go in or not any.

Mr. York—When you join in a body that takes all the members in the local association.

Mr. Stone—This says it allows them to affiliate at \$1.00 per member, but all active members of said local association must become members in order to take advantage of this right.

Mr. York—Otherwise you would have to pay \$1.50; that is what that means. But all active members can, by joining in a body, get the \$1.00 rate, otherwise pay \$1.50.

Pres. Dadant—Does that mean one can be a member of the Illinois State Association and still not be a member of the National?

Pres. York—Yes; and they can be a member of the National and not the Illinois State.

Mr. Stone—We would say that having one hundred members in our Association, and fifty don't want to join the National, the National won't take the fifty without all the hundred joining.

Mr. York—You have to join in a body in order to get the \$1.00 rate.

Mr. Baxter—You have to do that now under the old constitution. That is why I made a motion to increase the dues to \$1.50, so we would have enough money to pay.

Mr. Stone—If I send out the notice, then, that \$1.50 per member will give a membership in the State and National, next year our association will go down to 150 members.

Mr. York—That doesn't work out so in Michigan. They have a great many more members today at \$1.50 than they had at \$1.00. They had the largest convention last year that the Michigan

State ever had. They get more for their money.

This constitution provides that the National can do more for its members; fifty cents is not enough to pay all the expenses including the salary of the General Manager. The National will have to do one of two things—adopt the new constitution or go out of business. They can't pay expenses otherwise.

Mr. Stone—They could take in the association if twenty-five members were willing to join it; and if the others didn't want to join the National they would not need to.

Mr. York—That would not be an affiliated organization.

Pres. Dadant—I would like to make a statement, because I was on the committee that discussed the changing of the constitution and offered the new constitution. Of course it was new to me. I did not attend the National last year. Two proposed constitutions were brought before the committee, as well as the old one, to be decided upon.

We were given this at four o'clock in the afternoon, and we worked all evening at it, until pretty nearly midnight, and then we put it off until the next morning, and worked two or three hours the next morning, and then we realized that the subject was such a deep one, and one of so much importance, that we ought to have had a week's work on it to do it justice.

At present there are people who think, as Mr. Stone suggested to me when he asked: "Is there a nigger in the wood-pile?" I didn't see the nigger. I don't believe there is. I don't believe Mr. York thinks there is. Mr. France is not satisfied with it.

Although we may not succeed this time in having this new form of constitution adopted, we have reached a transition point; the National Association has done some good, but to most of its members it does not do enough good to make it worth while to pay \$1.00.

The Colorado honey-producers have dropped out. Why? They have an association self-sufficient; they don't need the National.

Can we make it so useful that it will be worth \$2.00, or \$3.00, or \$4.00, or \$5.00, to belong to it?

We get together and discuss a few questions, and go home afterwards without actually doing anything much

for the bee-keepers at large. We must do something for the bee-keepers at large, as the citrus growers do in California, and the orange and lemon producers, getting the best prices for them. I feel that the time has now come; and I think we have no better man than Mr. France to accomplish results, although under the present circumstances Mr. France is handicapped.

Mr. France is not in favor of changing the constitution. But I believe if he were the manager, with the change, we would get along better. Whether it will pass now, it matters little, but sooner or later there will be a change, which will help us to progress.

There is a question raised by Mr. Stone, that would be a stumbling block. Is it possible for one part of our Association to affiliate with the National, and the other be an independent society? Can that be done?

These matters ought to be discussed thoroughly among the bee-keepers of the Association until such action is taken as is best.

I think that sooner or later we must get some method by which the National may make itself more necessary to each association and to its members—more indispensable to the bee-keepers of the country.

Mr. Baxter—I shall vote against the new Constitution.

The reasons for doing so as advanced by Mr. Stone are good. But it is only a small matter regarding the reasons why it should not be adopted.

They have, under the new Constitution, only five directors, instead of twelve. They say they can better get together by having only five—can converse together, and do business more easily. Is that so? If it is so, you will have to have those five directors from one near locality, because if they are widely scattered, in far parts of the country, they will have to be to the expense of traveling; therefore, the business has got to be done by correspondence.

I believe that twelve heads are better than five heads, and can more clearly represent the wishes of the different members throughout the country.

Now, then, why delegates? What are your National meetings if they are not social bodies? Those five directors, as I understand it, are going to transact all the business under this new

Constitution. Then what is the use in having delegates?

Mr. Baxter—A great part of the business is transacted through the meetings; therefore, this new business will virtually be transacted by the directors. Who is going to pay the delegates' expenses?

Mr. Stone—The different associations pay their delegates' expenses.

Mr. Baxter—When you are meeting in a certain locality, you will have delegates that are near that locality, but you will not get outside delegates. So far the business has been transacted, and real benefits have been derived from Mr. France's management. He has found sales for honey, and has secured many advantages to bee-keepers. I don't see how you are going to benefit at all by this new Constitution. On the contrary, I think you are going to virtually kill the National body if you adopt it.

If you need more money, raise the dues. You will get \$1.50 or \$2.00, provided you will make your local associations interesting, and get the people to attend. Show them that there is a profit to them in coming here—in what way they can profit by these meetings and receive benefit. One dollar or two dollars is nothing to a bee-keeper if you give him a good time, and show him he will get some benefit.

I believe the best thing that we can do is to vote this new Constitution down.

Mr. Stone—I like the Constitution, but I voted against it after carefully considering it.

Dr. Bohrer—There was a move made at San Antonio to change the Constitution disqualifying certain persons from holding office and I was opposed to it. I don't believe in disqualifying any one. If you don't want men to hold office don't elect them. Don't hold a man down; it is not in harmony with a free country.

I have attended conventions, and have paid what I was called upon to pay in order to keep up my part of the expenses, but I mainly have gone to conventions for what I expected to learn of the persons who attended those conventions. My idea was, we ought to get together and learn something that would benefit each one of us, and give it out to the bee-keepers at large. Attend these conventions,

and learn what we can, and offer what suggestions we can, and let the bee-keepers take what they want—and the balance it is their right and privilege to discard.

I did not vote for this proposed amendment to the Constitution, and for the National Convention, or any other convention, to try and pass resolutions, or enter into some kind of an organization, to increase the sale of honey—I do not think it is quite the thing. I must confess I always have thought that if honey was put upon the market in proper shape it would sell, but I do believe, by adopting an educational system, such as we have been talking about, that if people once learn that honey is the best sweet for civilization, that will increase the sale of honey. I am satisfied it will.

You put the absolutely pure honey on the market, and point out to the people that the glucose that is being sold to people is a deadly poison—then you will get the people to buy your honey.

I brought that up before the Legislature. I said: "You don't know what you are buying and feeding your children. A lot of men are putting fictitious labels, names, or something that don't mean anything, on their goods, and children are taking it as food. We want to stop that."

I wrote an article about that—these things that are put up in the shape of syrup—90 per cent glucose and 10 per cent syrup. It is called "Karo." I don't allow it to come into my house. And I certainly don't want my bees to get hold of it, because I think it would kill the brood. Teach the people that it is detrimental to feed such things to their children, or to eat it themselves, and put the pure article—honey—the most wholesome of all sweets, on the market, and educate the people to eat that—and you will sell as much honey as you can produce.

Mr. Baxter—Are the local organizations to pay the expenses of these delegates?

Pres. Dadant—That is not the understanding I have.

Mr. Baxter—We have three hundred members of this State Association. That entitles us to twelve delegates. Suppose the convention is in Denver—that is \$300.00 for railroad expenses; then there are the living expenses and the incidentals. Are we ready to meet

that expense? How about the Chicago-Northwestern?

Pres. Dadant—You are supposing the Association is going to pay for it. You must not argue on something that is not stated.

Mr. York—This new constitution provides for one delegate for each local association. You do not have to elect more than one, and you don't have to pay any expenses if he will go without.

Mr. Pyles—I got a letter from Mr. France, saying why he was going to vote against this change in the new constitution. I voted against it for the same reasons. One of them was the proposed increase in dues. I don't believe, after hearing this discussion, it makes one bit of difference whether a bee-keeper pays \$1.00, or \$1.50, or \$2.00, or \$5.00, if he gets the results; and if these people are going to make the National Association enough better, and it brings to each member that much more good, we can pay \$5.00 as easily as \$1.00, for we can get something back for our money; if we cannot, then we don't want it at all. We are paying 50 cents for a social organization, and get no benefit. I am in favor of the new constitution, and I would expect to receive something for my money.

Mr. Baxter—I differ here. It is not a social organization. The National is a real live organization. Do you mean to say the National has never done any of the bee-keepers of the United States any good? Show me where as much has been done for the amount of money that has been spent! The annual meetings are social. The directors have transacted business, good live business which has brought results. If they need more money, give them more. But to send delegates up there, and have to meet the expenses, I am opposed to it.

I want the constitution so amended that it will give the Board of Directors more power, if necessary, and that they may have more facilities for conducting their business, or more money if necessary, but you will never get the Board of Directors together in one body, because the expense to do that is too great, and you can't pay it out, and the National will not have it to pay out. It has to be done by correspondence, and by having twelve directors instead of five. You can then represent the different localities all over the

United States. Twelve directors are not too many for a big country like the United States. Five would not represent the different interests, nohow.

The directors are going to transact the business; the delegates will have only a little to say about what is going to be done and should be done. Why cut the number of the Board of Directors down from twelve to five? Why take the powers away from them? If this is done I feel sure that bad results would follow. I am strongly in favor of having the Board of Directors remain as it is under the old constitution, twelve in number.

Mr. Moore—About this delegate business: The new constitution provides that the local branches shall consist of not less than twenty-five members and each branch shall be entitled to one delegate, who will have one vote for each 50 members of the local association he represents or fraction of 50 members.

Mr. Stone—I think if it had not been for this National Association the bee-keepers of this State would not be half as numerous as they are. At the time when we got out our first annual report, Mr. Thomas G. Newman, who was then editor of the American Bee Journal, was the general manager. He sent matter to me that went into our first annual report, regarding a suit that had come up in Arkadelphia, Arkansas. The city authorities had given the man notice to remove his bees from the city limits; they were declared a nuisance. Some of the neighboring boys had stirred up the man's bees, and the bees had stung one of the boys, and that made the father mad and he declared the bees a nuisance. He got a warrant from the city authorities declaring that man's bees a nuisance.

Mr. Newman sent an attorney down there to defend this man's case; the National body paid the expense of the lawyer to defend the case. When suit was brought the lawyer went down there and he won, and it was appealed to the Supreme Court—and the Supreme Court confirmed the former decision.

The whole proceedings of that suit were published by the National Bee-Keepers' Association, and every place that the National has had a similar suit come up, this decision of the Supreme Court has been cited, and the cases have been dismissed. If it had not

been for this decision, and that the National had stepped in and defended this man, the bee-keepers would be set upon in every State and town in the United States.

Our bees now are just as much legal property as anything is, but we must not put them in places where it would be dangerous to anybody; and when we have done that, we are defended, and this has been accomplished through the efforts of the National.

I don't want anything better—in selling my honey—than I have already. I never knew a bee-keeper who produced more honey than he could sell.

I once knew a bee-keeper who had a lot of honey; on his way to market, he stopped at my house—stayed over night, and he would make his trip to Springfield, and get back to my house and stay over night again, and he never had any trouble in selling all that honey at \$1.00 a gallon.

I never have any trouble in selling my honey. I sell it in five-pound buckets.

I knew a man, P. J. England, and all the farmers in the neighborhood would buy a gallon of honey from him each fall. He always sold all the honey that he had without any trouble.

If I had honey to sell, or wanted to buy honey, I could do no better than to get the report of Mr. France that he sends out every year. It gives every man the information he wants, and comes to us without any expense to us.

Mr. Baxter—Don't you think that lawsuit in New York was more important than the one in Arkansas?

Mr. Stone—Yes. But if it had not been for the latter we would have fared a great deal worse, I believe.

Mr. York—It seems to me that everybody ought to find the National worth \$1.00 in dues.

Mr. Stone—It ought to be worth whatever amount it needs to help on the work.

Mr. York—Mr. France has not enough to pay his own salary for 1911. The Michigan Association have raised to \$1.50, and they have a larger association than they ever had.

Dr. Bohrer—Our State Association pays \$1.00 a year, and we have been turning in 50 cents to the Treasurer of the National Bee-Keepers' Association; that admits us in a body. Now, if this new Constitution is adopted,

will we be required to pay more than that?

Mr. Stone—\$1.50 a year.

Dr. Bohrer—Our Association meets next week, and I want to bring all these matters before them. I think there are many members throughout the United States that don't understand it.

Pres. Dadant—The vote is to be counted November 30th. If your Association meets next week, it will probably be too late to take action.

Mr. Stone—Didn't you get the National Report? You will find the Constitution as they propose it.

Dr. Bohrer—I cannot see to read. I have thought something like this—that I would lay the matter before them and say, if the new Constitution is adopted, we would have to increase our State dues. We might do this—leave the matter in the hands of the Secretary, and another year we will try to look out for the \$1.50 annual dues.

Mr. Kildow—I don't think it is right to cut the directors down, because five, it seems to me, is not as good as twelve.

Pres. Dadant—The argument used was this: When you have a matter to come before twelve men that live in different parts of the country, and they raise their objections, and you have to respond to them, and wait for them to answer, it consumes a great deal of time, and a great deal of correspondence, in taking the matter up with twelve directors.

Mr. Kildow—Yes, that is true; but I think that it is more representative. It is not what two or three think; they may be entirely contrary to what the majority think.

Mr. Pyles—The same thing would apply if you had twelve directors.

Mr. Stone—I would like to ask a question on this point:

Shall we instruct our Secretary to send out the twelve hundred letters, soliciting membership fees, and write them: "If paid before January 1st, \$1.00 pays the fees in the State and National, and in case the National adopts the new Constitution, after the first of January, the fees would be \$1.50 for membership in the State and National"?

Pres. Dadant—If that is done, then I would add, "If there is no change there would be no change in the price."

Mr. York—You will know inside of one week whether there is to be a change or not.

Pres. Dadant—Do you wish to make any motion in regard to that, or leave it to the Secretary?

Mr. Baxter—I don't see any use for any motion. If the constitution is adopted nobody can become a member of that Association after the first of January without paying the \$1.50.

Pres. Dadant—I don't see it that way.

Mr. Baxter—If you instruct the Secretary not to join the National, it is all right.

Pres. Dadant—It is necessary to take action in order to inform the Secretary as to what he shall do.

Mr. Baxter—The Secretary cannot do otherwise than take everybody that has paid in this Association from today on to the first of January, at 50 cents to the National; but after the first of January you are prohibited from taking in members into this society without paying \$1.00 to the National.

Pres. Dadant—We are not forced to stay with them when they change their constitution. We are a State organization.

Mr. Moore—The entire membership of the State Association are members of the National, either directly or through the State Association.

Mr. York—If I am not mistaken, heretofore every year we have voted whether or not this Association shall join the National in a body.

Mr. Stone—When the National gave us permission to come in for 50 cents a member, we took it for granted that every one that became a member here paid \$1.00 for that year, and that made him a member of both. We do not give them the privilege of coming for 50 cents into the State Association and leaving them out of the National.

Mr. York—Every year the Chicago-Northwestern votes whether or not we shall join the National in a body. I think we have done the same thing here.

Mr. Stone—We have done it once, and continued without further action.

Mr. Baxter—You cannot affiliate unless you affiliate every member. The constitution says that.

Mr. Pyles—Last year we had this matter up for discussion—the matter of joining the Association, and it was decided when we paid our membership dues it lasted up until a certain day,

and I think it was when the convention met. Now, all the people that join between now and the first of July become members of the State and National, and if the new constitution takes effect, and we wish to join after that time, it will run up until November. Your membership expires about this time. A resolution was passed that way.

Now, however, by joining in a body up to the first of January, we will take in a large part of the membership of the State Association for \$1.00, and then we can decide at the next meeting if we want to go in at \$1.50.

Mr. Baxter—I see no way out of it but to authorize the Secretary to affiliate with the National under the present existing conditions, and after we know the result of the vote, if it is carried, then to send out notices to bee-keepers of the State and notify them if they want to become affiliated with the National, they must send in their \$1.00 before the first of January, or they will have to join the National direct. I move this.

Motion seconded.

Mr. York—Suppose you vote today to join the National in a body, you are voting to join at the 50 cent rate. We will say that, tomorrow, Mr. Secretary or Mr. Treasurer sends 50 cents apiece for the present membership to Mr. France—he sends you a receipt; we have joined in a body. They are bound to take us at the \$1.00 rate; they can't do otherwise. They have accepted us in a body. We are working under the old constitution at the present time; the new one is not in force. Now say the first of January they change their rule and make it \$1.00—that doesn't affect those that have accepted, but it does affect new members, and we have to send in one dollar per member after that.

Mr. Baxter—After the first of January every member that comes in will have to pay the extra amount, or they could not be affiliated by joining this association, they would have to join the National direct.

Mr. Store—They can't join the National for \$1.00.

Mr. Baxter—\$1.50 direct.

Mr. Stone—I must send out my notices, that after the first of January it is \$1.50 for every one who wants to affiliate with the National.

The motion was put and carried.

Premium for Manipulating Bees.

Mr. Becker—A few years ago the Executive Committee, through the Illinois State Fair Association, asked a premium given for manipulating bees at the State Fair. Nobody else bringing any in, Mr. Werner, being a crippled man, and handling the bees, we made it out for him, and then the association had some cages made, paying \$50.00. Last year he was not there, so Mr. Coppin made the entry for it and he got the \$15.00. This year Mr. Coppin and Mr. Werner were both there, and both had entries. Mr. Stone, Mr. Coppin, Mr. Werner and myself talked the matter over and I told them that it originally was intended for Mr. Werner, on account of his being a cripple, and he came to the Fair, but if the association would do it, and Mr. Stone approved of it, that we let Mr. Werner have the first premium, and then the Association pay Mr. Coppin \$10.00, and then after this year it be left to the Association, by making a competitive premium thereafter, or cut it out and put in something else.

We owe Mr. Coppin \$10.00, and we would like this Association to decide what the Executive Committee shall do hereafter—will we cut it out or continue it? Of course we would have to increase it, make it a competitive premium. It must be done before the State Board meets.

Pres. Dadant—You all understand what this was—the question of manipulating a colony of bees at the State Fair on the grounds.

There is a premium for \$15.00 and nothing else; as I understand it \$10.00 was promised by the Executive Committee because there was more than one person exhibiting, and there was only one premium offered.

A member—I move that the action be approved, and an order for \$10.00 be drawn.

Motion carried.

Mr. York—I move that we request the State Board of Agriculture to offer three premiums, the first for \$15.00, the second for \$10.00, and the third for \$5.00, for manipulating bees on the State Fair Grounds during the annual Fair.

Motion seconded.

Dr. Bohrer—What is the object of having bees manipulated on the Fair grounds, and not explain how this manipulation is done?

Mr. York—The object is to make the exhibition instructive.

Pres. Dadant—If there are three premiums, it will give the one that does the best manipulating and the best instructing the largest premium.

Dr. Bohrer—In the State of Kansas they awarded a prize for the governing and handling of bees, and I have never seen one man yet who explained how it was done. They leave the public knowing no more about how it is done than before they commenced.

I object to awarding prizes for any such thing, unless the bees are handled by a qualified person, and he explains how it is done. The bees, when hungry, will take liquid sweets, and when they are filled in that way they will not act on the defensive.

I would be in favor of having this manipulation, if it were done in such a way that it would prove instructive; but if not instructive, I would not do it at all. Something of this kind could be made very instructive.

Mr. York—I can see how such a demonstration would be instructive. A great many people are afraid of bees; they might say, if this man handles bees, I guess I can also; but such people would not be taught how to handle them properly. I have heard Mr. Werner. I think one year when I was judge he was there, giving the people a very interesting talk. They don't have to juggle with bees. They can give a talk upon the contents of the hive, and so on.

Mr. Coppin—I think we did a little good at the Fair last year, in manipulating bees. We got Mr. Stone persuaded that he could safely come in, and he came into the cage, and the bees did not hurt him! (Laughter.)

Mr. Becker—It is very instructive to some of the people who attend the Fair. I have heard people say: "Do you see those bees—how they are handled in the cage? There is a fellow handling the bees without any gloves on, and without a veil on; just in his ordinary clothes. If they were my bees, he would put something on."

Mr. Baxter—I don't believe you should manipulate them without using a veil and appliances. I think the person manipulating the bees should be required to put his veil on, and have a smoker, and the different things that are used; and show the cells, and the brood, and the honey, and the whole

thing, and that no committee should award the prize to any one manipulating and instructing the public as to the handling of bees, unless this be done.

Pres. Dadant—The judges are not left to our selection. If they were left to us, we could instruct them. This matter of exhibition is undoubtedly proper, and a good thing, if it is done right.

Mr. Stone—I had quite a little experience last year. Mr. Coppin was in a cage handling bees; a crowd was hanging around the cage. I said to Mr. Coppin: "Are they 'sassy,' or are they not? I don't believe I would be afraid to come in the cage." And I did go in. The people would say: "There is a bee on the back of your hand." "Yes," I would say, "But it does not mean a sting." And some one would say that he would not dare handle bees without a veil on, at home—but these bees were not "sassy." Educate the people to know why the bees are "sassy" and why they are docile. Mr. Coppin knows that the people at the Fair grounds were pretty well entertained.

Mr. York—I think Mr. Baxter's point was well taken, and that the manipulator ought to have on a veil, and go through the whole performance.

Mr. Baxter—Somebody has to go before the Board of Agriculture and present this matter, and he should tell them why we want this.

Pres. Dadant—Do you wish to embody into the motion which is now before you the statement that you want a veil and smoker to be used?

Mr. Stone—The word "manipulation" will do.

Pres. Dadant—The question is of increasing the premiums from one to three? Let's vote upon that. From my point of view, it would be better to manipulate without the smoker and veil. Unless it is ruled against me, I will ask you to vote upon the motion, as to whether or not we shall give premiums in amounts of \$15.00, \$10.00 and \$5.00 instead of a single premium of \$15.00? I don't think you will be unanimous on the other question, while I do think you will be unanimous on this. As it is I will leave it to the meeting.

Motion put and carried.

Mr. Baxter—The question hinges now on what is the object of this manipulation. A practical apiarist does

not go into the apiaries without a smoker and veil. There are times when he can, and there are times when he cannot do without a smoker; he can almost always do without a smoker, but it is not always prudent to do so, and, therefore, when you manipulate bees on the fair ground, you want to instruct the people how to manipulate them. You can take your veil off, and lay the smoker aside, and tell them why you did it, and tell them that they must not go to the hive without a smoker and veil; tell them how to work it. That is the object in having this competition. I don't object to having them take their veil off to show the people they have got them under perfect subjugation, and tell them why.

I make a motion that the committee be instructed to lay before the Board of Agriculture the object of these competitive premiums, and make a recommendation that the bees shall be manipulated as they are ordinarily in the apiary, and then the person doing the manipulating can tell the people that they can take off their veil and lay aside their smoker, and explain how it is done, and explain the general manipulation of bees under all circumstances. Motion seconded.

Mr. Becker—That is the judge's business. It is for him to say who does the best. If there are three competitors, all three will have to show their skill, and the Executive Committee need not explain to them how they must do this. I understand that Mr. Coppin was out to the fair grounds nearly every day and worked with the bees at least once a day.

Mr. Stone—Why not have this exhibit educational?

When there are three competitors, they will have to make it educational, and do it in such a way that it will be approved of by the judge.

The motion was put and carried.

Premium of Samples of Honey.

Mr. Becker—There is one more question regarding the premium list. It states, "Samples of honey not less than one-half pound." Heretofore they always have taken into account the number of samples. The premium was given to a man who did not have anywhere near as many as I had. The judge said, "If this premium was on the number, you would get the premium," but he gave me the third

premium. I think the number of samples ought to be taken into account, and that it should say, "Display of samples."

Pres. Dadant—The best and largest number of samples of extracted honey. It reads, "Display of samples of extracted honey, not less than one-half pound each." Mr. Becker proposes "Display of best and largest number of samples of extracted honey, not less than one-half pound each."

Pres. Dadant—Do you make that as a motion?

Mr. Becker—Yes.

It was seconded.

Mr. Baxter—What is the object of making exhibits—a quantity of material or to show the best you have? I don't think that point is well taken. There should be a premium for the best, and then another premium for the best display; that is the way it is in the horticultural department.

Mr. Stone—That would not work here, with samples of honey. There is only a \$5.00 premium.

Mr. Baxter—Under this ruling, a man that has a very inferior article, but much display, would carry off the premium, while the man with a smaller exhibit but with a better quality—and not quantity—would get left. Does that encourage the exhibition of good honey?

Mr. York—I would like to ask what is the object of this particular exhibit? I always considered the number of different samples that were in this exhibit. I didn't consider the quality. The number of different kinds of honey—the variety—was considered.

Mr. Baxter—I mean quality as to display.

Pres. Dadant—Here is one thing that, perhaps, has not been noticed: There are two premiums, one for display of samples of extracted honey—not less than one-half pound each—and then another one for display of extracted honey.

Mr. Becker—If you give it on the best display, you are not giving it on samples of honey; you are giving it on bottles. It provides you must have no less than one-half pound each. If a man gathers honey all over the United States for years and years, and some man comes along with seven or eight fancy bottles of colored glass, and he is given the premium, the premium will be given on the glass, but not on

the samples of honey. I want the number of samples taken into account.

Mr. Pyles—Why not have this motion read, premium on the largest number of samples?

Pres. Dadant—You might have the same kind, in different bottles.

Mr. Pyles—"The best and largest"—one has the same amount of meaning that the other has; carries just as much weight as the man who had the fine article—the largest number—the greatest display. Why not make it "the best display?"

Mr. Baxter—I think it is all right the way it is.

Mr. York—Why not have the word, "Variety" of samples—"best and largest variety of samples of extracted honey"?

Motion amended, and amendment accepted.

The motion was put and carried.

Pres. Dadant—Mr. Kildow, have you a report?

When will it be your pleasure to hear Mr. Kildow's report?

Mr. Stone—I was going to suggest that if we have a night session, we could have the written reports.

Mr. Kildow—Can we not have these tonight? I move we adjourn until 7:30 o'clock this evening. I would say that my report states just exactly what business I have done.

The convention then adjourned until 7:30 p. m.

Report of Auditing Committee, 1911.

The convention met at 7:30 p. m.

Pres. Dadant—I understand the Committee on Resolutions has a resolution to offer.

A Member—The Secretary has requested me to read this:

Whereas, The Foul Brood Bill as passed by the General Assembly, May 19th, and signed by Governor Deneen June 7th, 1911, has fulfilled the desire of this Association; and

Whereas, The passage of this Bill was largely due to the untiring efforts of the Governor of the State of Illinois and of Representatives and Senators of the Forty-Seventh General Assembly; and

Whereas, By this law the bee-keepers of the State are making a successful beginning in overcoming the disease known as foul brood among bees; therefore, be it

Resolved, That the Illinois State Bee-Keepers' Association, in convention assembled this 24th day of November, 1911,

do tender their most hearty thanks to Governor Deneen and to the General Assembly of the State of Illinois for their valued assistance and energy in procuring this law.

(Signed)

C. P. DADANT,
President.
JAS. A. STONE,
Secretary.

Concurred in by the Eastern Illinois Bee-Keepers' Association by its President.
JESSE ROBERTS.

Concurred in by the Chicago-Northwestern Bee-Keepers' Association by its President.

GEO. W. YORK,
Pres. C. N. W. Ass'n.

Pres. Dadant—As I understand, it is agreed to by the Eastern Illinois Bee-Keepers' Association by its president, and by the Chicago-Northwestern Bee-Keepers' Association by its president.

Mr. York—That is the first I have heard of it.

Pres. Dadant—Is it agreeable to you?

Mr. York—Yes; surely.

Pres. Dadant—The president of the Eastern Illinois said to me himself, he was in favor of it, and that he would sign it as representing the Eastern Illinois Bee-Keepers' Association. This is presented by the Resolution Committee with their recommendation. What will we do with it?

A Member—I move its adoption.

Motion seconded and carried.

Pres. Dadant—I think the next thing on the program is what we were interrupted in by the adjournment. If there are no further motions to be made, we will hear Mr. Kildow's report.

Mr. Moore—The Auditing Committee is ready to report.

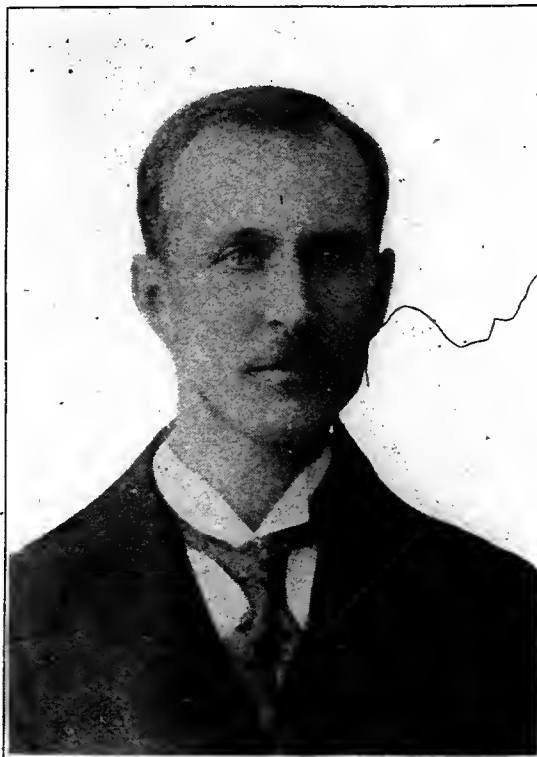
Report of Auditing Committee.

We, the auditing Committee, find in the hands of Treasurer Chas. Becker, \$925.28 in the State Fund, and \$234.94 in the Association Fund, or a total of \$1,160.22, as shown by his accounts.

We would suggest that hereafter the Treasurer keep these two accounts separate, starting with the above amounts.

We would also suggest that the Secretary keep only the "Association Fund" account and start now with \$234.94 balance, as shown on his books, which amount is in the hands of the Treasurer.

The Secretary, in drawing orders, shall stamp them (with rubber stamp, large letters) the words "Association Fund" or "State Fund," as the case



A. L. KILDOW,
State Foul Brood Inspector for Illinois.

Report of State Inspector of Apiaries,

From April 1 to September 30, 1911.

Date.	No. Days.	No. Apiaries Visited.....	No. Colonies.....	No. Discased Apiaries.....	No. Apiaries Having A.F.B.	No. Apiaries Having E.F.B.	No. Apiaries Having Both...	No. Counties Visited.....	No. Counties Having Disease.....	Expense.....	Per Diem.....
April	1½	1	50	.....	.....	.....	.....	.....	.....	.....	\$ 2.00
May	10	14	315	10	5	4	.....	.....	.....	.....	40.00
June	7½	16	567	11	2	9	.....	.....	.....	.....	30.00
July	19	46	824	21	11	10	.....	.....	.....	.....	76.00
August ...	43	120	1704	30	17	12	1	.....	.....	.....	172.00
September ..	30	64	1473	16	10	6	1	.....	.....	.....	120.00
Total.....	110	261	4933	88	45	41	2	30	25	\$40.37	\$440.00

I hereby certify that the above report is correct.

A. L. KILDOW,
State Inspector of Apiaries.

may be, using separate order books for each fund.

W. B. MOORE,
A. L. KILDOW,
GEORGE W. YORK.

Pres. Dadant—You have heard the report of the committee; what will you do with it?

Mr. Pyles—I move it be approved.

Motion seconded and carried.

Pres. Dadant—The only thing I could find to criticise in that report is that the number of diseased colonies in the diseased apiaries is not stated.

Mr. Kildow—I will explain that. Sometimes when you strike a large apiary of 100 or so colonies, it is hard to go through every colony.

If I find it diseased, I mark it a diseased apiary. Of course, I might go through it—and as far as I went, tell how many colonies I found, but there might be a good many more that I didn't examine. If an apiary is diseased, it is diseased.

Pres. Dadant—Is there no way to secure this data, either from the bee-keeper who treats those colonies, or from the deputy who treats them?

Mr. Kildow—Of course, I am under the instruction of this Association, and if this Association says that I should go through all of them, I can do it, but sometimes it takes a good deal of time to go through 100 or 200 colonies.

Mr. Baxter—We want to know the results when you find an apiary diseased, and whether the disease has been stamped out.

Mr. Kildow—Now, here in my book, wherever the party has promised to clean up, I mark it so, and where I treat them, I mark that on my book. Some of them may not have done what I told them to do.

Mr. Baxter—You want to see that they get after the disease. I called on one man at Peoria, Ill.; I was a deputy, and I had found that he had the disease; when I met him he said, yes, he had the disease there. Mr. Smith had called on him a time or two, and he had been treating it for years, and the disease was still there; and I think you will find it that way in a great many cases; where an Inspector has reported a disease, you will find it still there. The bee-keeper has been treating it and trying to stamp it out, but it is still there.

Mr. Moore—Of course, under the old law, this old way of inspecting was the best we could do, but it seems that, under this new law, we have things in our hands, and the Inspector can order that this be done. If the Inspector finds diseased bees, he can order that the same be abated within a specified time, and if the person so ordered refuses or fails to abate this nuisance, he may cause such nuisance to be abated.

If the Inspector finds diseased bees, he has power to act.

The new Bill reads: "If the Inspector of Apiaries shall have reason to believe that any apiary is infected by foul brood or other contagious disease, he shall have the power to inspect, or cause to be inspected, from time to time, such apiary, and, for the purpose of such inspection, he or his assistants are authorized, during reasonable business hours, to enter into or upon any farm or premises, or other building or place used for the purpose of propagating or nurturing bees. If said Inspector of Apiaries, or his assistants, shall find by inspection that any person, firm or corporation is maintaining a nuisance as described in this section, he shall notify, in writing, the owner or occupant of the premises containing the nuisance so disclosed of the fact such nuisance exists. He shall include in such notice a statement of the conditions constituting such nuisance, and order that the same be abated within a specified time, and a direction; written or printed, pointing out the methods which shall be taken to abate the same. Such notice or order may be served personally, or by depositing the same in the post office, properly stamped, addressed to the owner or occupant of the land or premises upon which such nuisance exists, and the direction for treatment may consist of a printed circular, bulletin or report of the Inspector of Apiaries, or an extract from same.

"If the person so notified shall refuse or fail to abate said nuisance in the manner and in the time prescribed in said notice, the Inspector of Apiaries may cause such nuisance to be abated, and he shall certify to the owner or person in charge of the premises the cost of abatement, and if not paid to him within sixty days thereafter, the same may be recovered, together with the costs of action, before any court

in the State having competent jurisdiction."

It seems to me that the inspector has everything in his own hands. Of course there will have to be considerable tact and judgment used in handling the various men. I think where you find an apiary diseased, and you have given notice to have it cleaned, that the inspector should take the pains to go back there within ten days, or two weeks at the outside.

Mr. Baxter—Providing it is at a season of the year he can do it.

Mr. Moore—That is certainly to be taken into consideration. After giving notice, the next thing to do is to see that the work is done.

Mr. Kildow—I have instructions printed—blanks to fill out, and also have a copy of the McEvoy treatment printed. I leave these with the parties, and when I find some one who I think will not do it, I limit the time.

There was one man at Watseka, that took a very contrary attitude. He would not come out to the bee-yard with me at all. I found one colony badly diseased—it was badly infected with European foul brood.

I wrote out a notice and gave it to his wife, and I appointed Mr. Roberts a deputy for that vicinity; and I told him to go back there in a certain number of days and see what had been done. He had done nothing. His wife said he saw the deputy coming, and he went out and left the wife to face the deputy. She told the deputy that her husband had in a way looked through the colony, and didn't find any sick bees; that they were rather weak, and he would not do anything.

The deputy wrote me, and asked me what to do.

I wrote a letter to this man and gave him five days to clean that up, or that we would do it for him, and I wrote to the deputy, advising him what I had done.

When the man got my letter he went out and burned the hive up. When I find parties who seem in any way hostile I limit the time in which they are to clean up. We were rather handicapped the first six months of this year, and I went pretty easy. I did this so as not to get in trouble until we got to working as we could rightfully do.

Pres. Dadant—In this matter, we can see where our inspector is wanting to

know the feeling of the Association, and it is easy to understand that it has been impossible for him to do the things that he will now be able to do in the way of inspecting; but I think we should express ourselves as being anxious that he clean everything up entirely wherever he goes. That is to say, it is better to go back and make sure of the spots where he has visited, rather than to visit more spots and leave those already visited unfinished.

I believe it would be a good plan, and I suggest it, to get a statement from the parties who are to do the cleaning up, on what day they will do it; that you make a memorandum of the day when they have been visited, and when you again visit them, and if the disease has been eradicated, mark it as cured, and if it has not been cured, mark them again, diseased.

I think at that time, and before you pay anything to the deputies for treating the bees, I think it would be well to demand a statement from them as to what has been done; if you have a deputy, let your deputy make the statement of the work done, and the number of colonies treated, before he gets the pay for his labor; then we will avoid any criticism on the part of the people, who will find fault if given any sort of an opportunity, or without one, and I think it would be well if we could show the number of colonies treated and cured by the parties who have done it.

Mr. Moore—The inspector or deputy, as I understand it, is not supposed to treat bees except at the expense of the owner. If the inspector inspects an apiary, he gets paid for that work. It is his place to **inspect**, and leave an order that the treatment be given. If a man wants to have him treat them, such service is charged up to the man.

Pres. Dadant—If you go there and demand that the man treat the bees, you must make sure that it has been done. If you don't do that, the man may say he has treated them, whether or not this is the truth of the matter.

Mr. Moore—The duty of the inspector is to see that his orders are carried out.

In regard to a deputy not being paid until he shows a colony has been treated—that won't work; he is paid for inspecting those colonies.

Pres. Dadant—If he only looks at

one or two colonies he has not done the full job. He should inspect the entire apiary, and of course get paid for his time and service, even if he has to go back the second time. The number of colonies treated or destroyed, I think, should be shown with the report. In that way we will avoid any criticism whatever from any source.

Mr. Kildow—I didn't hunt up new territory this fall. I thought I would better go back over some I had visited. I didn't go to any new places, only where I had calls to go.

I wanted to get your ideas of what you want in these things, and what is the best thing to do. I have gone heretofore on my own judgment.

Mr. Baxter—I think this law is very plain and shows what is expected of the deputy and of the inspector.

Pres. Dadant—It is better to treat thoroughly a small portion of the country than to go over a greater portion of the country and not treat so thoroughly.

Mr. Baxter—If you visit a certain locality, you don't need to go through the whole of each apiary there located. The thing to do would be to give instructions for cleaning up. The inspector, himself, should appoint some deputy for that locality.

If you find a diseased colony, why inspect the whole apiary?

L. C. Dadant—The owner cannot see what you can see. The Inspector ought to have better eyes to see foul brood than the owner.

Mr. Baxter—Then the owner cannot clean up foul brood?

L. C. Dadant—The Inspector should go through the hives, and mark the hives that ought to be cleaned.

Mr. Pyles—While inspecting, a year ago last summer, it was invariably my custom, where I went in an apiary of five, six or eight colonies, to look over the strongest, and if the strongest were diseased, I pronounced them all diseased; the weak colonies are, if the strong colonies are. Those that are exceptionally strong, it is not necessary to examine them, unless you find it among the weak ones; and if you find the strong ones diseased, it is not necessary to look at the real weak ones, because they are diseased, and you will find it so in every case. And then I would condemn the entire apiary; but when you go into an apiary where there are 100 colonies, that is the man

who needs the protection! I would inspect thoroughly everything there, if I find the disease at all. If I don't find it among the weak ones, it is not necessary to look at the strong ones.

L. C. Dadant—If you wait until you have a colony weakened by the disease, you wait too long.

Mr. Coppin—I went out to do a little work along that line in a man's yard, and I would look up the weakest colonies in the yard. If I looked through the weak colonies, I thought that was the most likely place to find the disease, if any existed. If I looked through the weak colonies and could not find any disease, I came to the conclusion that there was no use of my looking through all of those strong colonies. That was my idea.

Pres. Dadant—If you go through colonies of bees where the disease is just commencing, it is just as likely to be in the strong ones as in the weak ones. If there is none whatever in the weak ones, you can take your chances on the rest in the localities you speak of.

L. C. Dadant—In the spring of the year, these strong colonies will rob out those that are weak, and the strongest colonies will have the disease. Those are the ones you want to catch.

Mr. Pyles—That may be true in localities where the disease exists all around you. I am talking about inspection work when you don't know where to find the disease. It is not necessary, then, to pay a man to look through 100 colonies of bees. Where you know that the disease exists, then you must look at everything with suspicion.

A man that is used to detecting foul brood don't have to look through all the hives to find something that is bad; he will find it on the outside.

Mr. Baxter—We talked about foul brood at the Chicago-Northwestern Convention three years ago; had expressions from men all over the country, and at the end of the first day I had to acknowledge the more we talked, the less I knew about it.

Mr. Coppin—One yard of bees that I inspected a year ago, of eight colonies, I could not find a thing wrong with them, but the neighbors' bees all around there had the disease, and last spring I happened to look at this man's bees again, and every one of the eight colonies was affected; every one of

them had the disease, and bad at that.

Mr. Baxter—I would like some of the experts to explain this: Last winter, while we were agitating this question of a Foul Brood law, a young man, who is a bee-keeper at N——, took it into his head that he knew there was a case of foul brood close to his place, as soon as he heard what I had to say. He went to the man the next day, and asked him to look at a certain hive. He had seen this hive in October. There were six colonies on the place—five strong, and one weak. It was this weak hive he suspicioned. He asked the proprietor to take a sample of comb with the dead larvae, and he sent it to Washington, to Dr. Phillips, and Dr. Phillips wrote back that it was a genuine case of American foul brood.

He told me that as soon as he got word from Dr. Phillips and went out there, he found that every bee was dead.

Where did that come from? The other five colonies were strong.

Pres. Dadant—Any other remarks upon the report of the foul brood Inspector? We are now ready for the motion, either approving or disapproving it.

Mr. Moore—He started giving us some other figures out of the book—did you get through with that, Mr. Kildow?

Mr. Kildow—It was just a few remarks.

Mr. York—I move the report be approved.

Motion seconded, put and carried.

Miscellaneous Discussion.

Mr. Stone—There are one or two questions we ought to decide tonight. At what hour will we have our picture taken, to go into the Report, so that we can notify the artist?

Mr. Moore—I would suggest 11:30 tomorrow forenoon.

A Member—I move that we have the picture taken at ten o'clock and adjourn after that.

Motion seconded, put and carried.

Pres. Dadant—Do you want to arrange the order of the day for tomorrow morning?

Mr. York—Have you set the time for the election of officers? Why not have a meeting at 9 o'clock?

Mr. Baxter—Why can't we arrange tonight for our meeting next year? Why can't we go to Chicago and meet

with the Chicago-Northwestern next year?

Mr. Moore—This organization is known as the Illinois Bee-Keepers' Association, and the principal place of business is Springfield.

Mr. Stone—You have to have your annual meeting here.

Mr. York—The Executive Committee is doing the business at this point, the principal place of business. You can meet somewhere else if you want to, I think. I may say if the new constitution of the National passes, there probably will be no meeting of the National next year, and it is my thought that we have a big meeting in Chicago at the time of the meeting of the Chicago-Northwestern. It would be a very nice thing if the Illinois State could meet there, too. I would like to invite this Association, any way, to come to the Chicago-Northwestern meeting two weeks from yesterday and today, December 6 and 7, 1911. We meet in the Great Northern Hotel, and have the finest room we ever met in as a bee-keepers' convention.

Mr. Stone—The location is in Springfield, in the County of Sangamon, State of Illinois.

Mr. Moore—That is right—that part of it.

Mr. York—How many must be present in order to do business? How many are required to hold a meeting to make it legal?

Mr. Stone—They can have a meeting here, and then in Chicago, if they want to; but this is the place of business.

Mr. Moore—I have been thinking if we go to Chicago at the same time that the Chicago-Northwestern meets, it will be a kind of joint affair. It would not be a meeting of the Illinois State Association. If we had a meeting we would simply have to call the members together, a sort of a side-issue.

Mr. Baxter—The Chicago-Northwestern would be like when the National met there; it adjourned and mixed in with the State.

Pres. Dadant—Each association would have to do its business separately. We could have a forenoon session and let the officers of the Illinois State Association take charge, and then another session for the Chicago-Northwestern, and let its officers preside. Do you wish to take action upon that?

Mr. York—Refer it to the Executive

Committee, I would suggest. I move that the time and place of the next annual meeting be left in the hands of the Executive Committee, with full power to act.

Motion seconded.

Mr. Baxter—I would like to amend that, and include something more—that the sense of this Association is that it should be in Chicago.

Mr. York—I accept the amendment.

Pres. Dadant—The Executive Committee will not do anything rash, if we can't, we won't.

The motion was put and was carried.

Mr. Baxter—In case they might go to Chicago—that would be during the Fat Stock Show; that is always the first week in December.

Now I move, in case we meet here in Springfield, that the Executive Committee be authorized to choose some other day than that on which the Grand Lodge meets. I, for one, want to go to both.

Mr. Pyles—I second the motion.

Mr. Stone—Would it not be well to make a motion stating the day it should be held?

Mr. Baxter—Leave that to the Executive Committee.

The motion was put and carried.

Mr. Pyles—It has been suggested that the button or the badge that is used next year be a good button, instead of a cheap one, and hereafter we would then need to have only a streamer attached to the button. I suggest that the Secretary be instructed to get better buttons for next year; get one that will be nice, and have an appropriate streamer put on for each year, so that it will not be necessary to buy a new button each year.

Mr. Moore—Unless you get something in the nature of a solid gold button, it would not be a very lasting affair. Take any plated button, a cheap button, I think, answers the purpose all right. A good button would be misplaced, and you would not have it when you wanted it.

Pres. Dadant—I have two questions that have been lying on the table.

Dr. Miller sent in two questions; we answered one. The second one is:

Width of Glass for Shipping-Cases.

"Which is preferable in shipping-cases, 2-inch or 3-inch glass?"

Mr. Kildow—I like 3-inch glass.

Mr. York—I suggest we take a vote on that question.

Pres. Dadant—I notice they are discussing that in Gleanings this month. If you have any arguments, either in favor or against, I would like to hear from you about this.

Mr. Kildow—I think those discussions are a waste of paper, to my notion. The point argued in favor of the 3-inch glass is that it shows the honey off better; the argument in favor of the 2-inch glass is the strength of the case. The 3-inch glass shows the honey off to pretty good advantage, and you have strength enough, so I don't see why the 3-inch glass is not all right.

Mr. Coppin—I prefer the 3-inch glass.

Mr. York—I think it depends altogether on whether you are going to show the honey at the State Fair, or sell it in the wholesale market. If I were going to put up an exhibit at the Fair, I would want comb honey in 3-inch glass cases, but, in shipping it to Chicago markets, I don't think it makes a bit of difference; they buy the **honey** in the case there. They sell it to grocers by the case. There can be no object in having a larger glass for ordinary business of honey-production, but for exhibition, the larger glass would be better. I am sure you could not get a fraction of a cent per pound more for honey in 3-inch glass case in Chicago than in the 2-inch.

Mr. Kildow—I quit using glass entirely. I slip a little board in place of the glass. I have not used the glass for two years, I think, and I get as much for the honey. I always used 3-inch before.

Mr. York—If there was no glass in, I am afraid the honey would be tampered with in a grocery store. People would come along and stick their fingers in the honey, especially the children.

Mr. Kildow—If they want glass, I will send the glass along, and let them put it in themselves.

Fruit-Juice in the Hives.

Pres. Dadant—"Has any one ever had any good results from fruit-juice in the hives?"

Mr. Baxter—No; fruit-juice is damaging in the hives.

Pres. Dadant—How many of you think good results can be had from

fruit-juice? None. How many of you think bad results would be obtained? Several.

Prospects for White Clover in 1912.

L. C. Dadant—What is the prospect for white clover crop for 1912?

Mr. Stone—It is good, I think; there is a good stand of white clover everywhere.

Mr. Kildow—In my neighborhood there was nothing; no chance for next year.

Mr. Baxter—I should say there would not be much show.

Mr. Pyles—It is a problem. In some places we find a good deal of young white clover coming up. It will largely depend upon the winter. I doubt whether we will have a large crop.

Mr. York—I am in the city, where we don't have much white clover, but we have some there every year, on the lawns.

Mr. Moore—I think in my locality there are good prospects for a white clover crop. We started in with rains the first part of August; we had rainy weather, favorable for its growth up to the first of November or later. There is lots of young clover.

Mr. Coppin—I think it is very favorable in our locality.

Pres. Dadant—It is very poor in our locality.

Miss Holmes—The prospect now is fine, I think; it may freeze out, though.

Pres. Dadant—I believe within a few miles there is a difference in the prospect; some have good prospects and some have none whatever.

Mr. Baxter—White clover has failed to come up in our district; dew-grass came up and killed everything. Still, I have noticed when we had these fall rains we always had a crop of clover.

Mr. Pyles—Some places have quite a lot of clover, but it is very small, and I don't believe that kind of clover will stand hard freezing weather without any snow on the ground.

Mr. Stone—We are liable to have deep snows this winter.

Mr. Baxter—We are liable to have dry weather from the 20th of December to the 20th of March; it is more probable than otherwise.

Mr. Stone—I think we get the benefit of western irrigation here.

Pres. Dadant—In what way—in drouth?

The convention then adjourned until 8:30 a. m. the next day.

SECOND DAY—MORNING SESSION.

Pres. Dadant—Will we go on with the election of officers, or discuss some matter first?

Mr. Stone—I suggest that we have the election of officers the next thing after the picture is taken.

Mr. Pyles—I don't think it would be policy to wait until after we get the picture taken, because I heard the artist tell Mr. Stone he would be here as near after ten o'clock as he could, but that it might be eleven or half-past eleven.

Pres. Dadant—Suppose we wait until half-past nine. If there are any more questions to be asked, we can bring up some questions, or if there is any other business to attend to, we would like to attend to it this morning.

Date of Annual Meeting.

Mr. Stone—I would like to have it decided at what time we will have our annual meeting.

Pres. Dadant—That is left to the Executive Committee; but we can discuss it informally, of course.

Mr. Kildow—I hardly know how to bring it about and make it a success. It seems to me our business ought to be done here, and if we divide it up we won't get out a Report like we have now; it seems to me we would get all muddled up, so I don't know what to do.

Mr. Moore—I think that if we have to have part of the meeting here—the business meeting—we should have the whole thing here, the same as we are now doing. I don't think it would be advisable to come down here and hold a session and adjourn to Chicago. You could not get the membership out here unless they know there is going to be a pretty good program; not many would turn out. I would like to have the meeting earlier, along the middle of October; that would suit me better than this late in the season. The weather is more pleasant, and you can get around and see more of the city. It might be some inducement for some of the members to turn out.

As far as the Chicago meeting is concerned, we can go up there anyway; but I don't think it advisable to

hold a meeting of this Association there as part of the other meeting.

Mr. Kildow—It seems to me, if we would meet there, that only a few would come. Of course only a few come down here, but would we be any better off by changing and going up there? I don't know whether I could go to both places. And I think that is the way with a good many. If that is only a social meeting up there, I don't know whether I would go or not.

Mr. Stone—I feel just exactly as Mr. Moore has expressed himself. Under the present condition, between the Chicago-Northwestern and the Illinois State and other societies that have affiliated with us, we are just as friendly as we can possibly be. Yesterday Br. Baxter offered his fee to this Association. He says, "I want to belong to this and to the Chicago-Northwestern, too." I said, "Keep your fees and join the Chicago-Northwestern; that will make you a member of this one, too." The fees are just the same, and we can't have any dividing line in our feelings. I will work for a membership for the Chicago-Northwestern just as strong as I will for a membership in our State Association. It is just the same, no matter which way it goes.

The conditions would change if we take the meeting up there—they would all join there, and if we get our membership here too small we won't have a meeting and a short-hand report, and it will cut down our Report, and that is the principal thing—to get the matter for that Report.

If we get the influential members here, they are the ones who will do the talking, even if we had five hundred present the men we can look to for advice, and for information—if we can get them to come here, then we have the matter for our Report, and each member can have a copy. But if we met here for a business session, and then adjourned to Chicago, and it was understood that this is what we were going to do, our membership would grow much less.

If the members from the Southern part of our state had to go to Chicago to a meeting, they would not come here. It would not help the Chicago-Northwestern any, and it would injure the State convention in the attendance of its members.

I think it would be better for us to

continue as we are, and get what members we can to go to the Chicago-Northwestern convention, and they will help to make this Report at two places.

Pres. Dadant—The question the secretary asked, was to advise as to the day of meeting. Let us come back to the question. We would like to hear suggestions.

Mr. Moore—As I stated, I would be better satisfied with an earlier date—the first or the middle of October.

Mr. Stone—That would suit everybody better than any other date. The first of October we would strike the State Fair.

Mr. Moore—Make it the latter part of October.

Mr. Pyles—I believe that some time the latter part of October would be a good time.

Pres. Dadant—Mr. Becker is a member of the committee, let us hear from him.

Mr. Becker—Any time suits me.

Producing Comb and Extracted Honey.

"Is there anything gained by comb honey producers producing a reasonable amount of extracted honey?"

Mr. Moore—I think so. I think there is something to be gained.

Pres. Dadant—I think it should be explained what a **reasonable** amount of honey would be.

Mr. Pyles—A **reasonable** amount of extracted honey produced in connection with comb-honey production, would be what would not interfere with the amount of comb-honey produced to any great extent. I wrote the question. Of course I wanted it discussed. That is what I had in view.

Mr. Coppin—As a comb-honey producer at our place, I always produced a small amount of extracted honey for the home trade. Lots of people want extracted honey and not the comb, and I try to produce enough for my own trade, of extracted honey; the rest, of comb. Sometimes we run short of extracted honey. If I run some for extracted, I cut down the comb-honey supply.

Mr. Moore—I think the comb-honey producer, if he has his extracting supers ready the first part of the season, the latter part of fruit-bloom, the bees would all go more readily into the frames than into the small sections separated by separators.

When the bees once get started

going up, you can lift up the extracting supers and put the section supers underneath, and they will go to work just as quickly in section-supers as if you put them on in the first place; and you will have the advantage of extra work in the extracting supers. It will be just that much gain, enough to pay you.

Mr. Coppin—My idea about that is, you would have too many combs to look after, then and during the balance of the year. I could not keep enough on hand, putting an extracting super under each colony of bees the latter part of the fruit-bloom.

Mr. Moore—There is one point right there. It does not take very many pounds of honey to pay for the expense and trouble. You will get enough the first season you use it. I think it would pay a man, and pay him well.

Mr. Sauer—That is my plan. I get as much for bulk honey as for section honey.

Pres. Dadant—The question is, is there anything to be gained by comb-honey producers producing a reasonable amount of extracted honey?

Mr. Pyles—I don't know, but perhaps I can offer something. The past year there was very little honey coming in the fore part of the season, but you could get something in the extracting supers. As time went along we got the extracting supers pretty well filled, and we would not have had anything in the comb-honey supers. We produce our honey largely in divisible hives, with perhaps three sections of the brood-chamber. When it came time for the honey to come in readily, we lifted up the top section of this hive and put comb-honey supers underneath, and those were never removed as long as the honey was coming in. The bees would work readily in sections of extracting supers when they would not work readily otherwise.

Pres. Dadant—You all know I am for extracted honey; we used to produce comb-honey. The reason we changed was, that when we put sections on one hive and extracting supers on the other, it was as if we had forbidden one-half from storing honey while the other produced. I tried to give to a colony, in a super made for the purpose, four rows of sections in the center and extracting combs on the outside. The bees filled the extracting combs before they worked on the sec-

tions; they began at the outer edges, which you all know is not their custom when you give them the whole thing of one kind.

Oliver Foster explained once in his book, that bees are not naturally inclined to go into small receptacles for the winter, and, of course, they put up their honey expecting to use it for the winter—therefore they like large places. That is why they hesitate to work in sections, when they will work readily in long combs; so it is not astonishing I get them to succeed so well, besides, in the case of sections, they have only foundation instead of comb already built.

I would like to hear from some others.

Mr. Roberts—I had considerable experience in the State of Wisconsin in producing honey. I have been here about seventeen years, but I always got more honey from extracting in Wisconsin than in sections. The reason is plain—the bees can get into a body together and create heat enough, and you get honey quicker, and more, from extracting supers than from sections. In a small place there is not enough bees to create heat, so that a big body will produce more honey than in the sections.

Another thing I have against the production of section comb honey, is because everybody produces it. You take a man with two colonies of bees; he will have section comb honey. When he gets the sections full he takes it to the grocer and asks him, "How much will you give me for my honey?" He is not going to the expense of getting an extractor. Another thing, I always get more than twice as much honey from the same colony in extracted as I do in comb. I could easily sell my extracted for 10 cents and make more money out of it than comb honey at 15 or 20 cents.

Mr. Baxter—My experience has been the same as Mr. Dadant's. I find it works very well. Just as soon as the combs are filled they begin to work in sections and fill them in, working from the sides to the center, which is just the opposite from what they do when they have full super extracting frames.

Mr. Sauer—Do they seem to go into the super just the same?

Mr. Baxter—Yes, sir. Better.

Pres. Dadant—How many are in favor of the affirmative?

Unanimous vote taken.

Mr. Roberts—I want to ask, what does the word pile mean in bee-culture?

Mr. Moore—I think that is an English expression.

Mr. Pyles—You say not so much a "lot," but so much a "pile;" so much a "pile" for the honey. That would mean some designated amount, undoubtedly; so much per "pile."

Pres. Dadant—Louis C. Dadant has a paper on Marketing Honey, which we will have now:

Marketing Honey—From the Producer's Standpoint.

By L. C. Dadant.

As we are producers of extracted honey exclusively and have not for a great many years produced or handled a single pound of comb-honey, the only ideas I can give are on the extracted. After the crop is harvested the next thing is to find a market. Some beekeepers have much of their crop sold before it is harvested, this is especially true when the preceding crop has been very short and the market practically cleared of old honey.

In marketing a crop of honey the producers' energy is largely responsible for the price he secures. Farmers, truckers, fruit-growers; and, in fact, all producers, vary largely in the prices they secure for their crops. In our vicinity this year Jonathan apples sold as low as 50 cents per bushel, delivered, because the producer was a farmer who did not give himself the trouble to hunt a market for his fruit. These apples should have sold readily at twice the price.

The same thing is true of beekeepers who have a crop to sell. One man may be a good salesman and get 20 cents per pound for extracted honey, the other, a poor salesman, may get only 6 cents. We have six out-apiaries and at each apiary we give the farmer one-fifth of the crop. Of these six men but one is a really good salesman, two are fair, two are poor and the last one is no salesman at all. The first one sells at from 12 cents to 13 cents a pound out of the barrels right at his home, and often buys more from others to supply his trade. The other two have their share sold at a fair price before the next crop is ready to harvest, two

more sell at whatever price they can get. The last one, though situated within three miles of the first, retails but little of his honey, preferring that we buy it at whatever price we can afford to pay. It is indeed little wonder when there is a good crop that prices should go so low. The only thing to do is either to buy the surplus honey or hold back and wait until the market clears.

The community in which a beekeeper lives has a great deal to do with honey sales. Foreigners, as a rule, are good honey customers. Mr. Ahlers, of Wisconsin, stated at the Chicago-Northwestern meeting last year that he sold nearly all of his crop to Germans, because Germans have been educated to use honey. By the right kind of advertising and drumming any community can be taught to use it. After the people in a locality once get to using honey there is comparatively little trouble in getting rid of an ordinary crop.

In the bee papers the great cry is to sell your honey early. This in the main is very correct, especially when honey is sent to wholesalers or commission men in the city. In going over our sales for the last five years I find that from August 1st to October 1st we sold but 14 per cent of the crop, from October 1st to January 1st, 63 per cent of the crop, and after January 1st, 23 per cent. Since much of our honey goes to the beekeeper to fill out orders for his trade, part of this honey was delivered to the consumer considerably later than we sold it, for it had to be shipped by freight, liquefied, repacked and sold again before it was finally in the hands of the consumer. This would make the percentage of sales after January 1st larger than given and would probably average about 30 per cent. This late winter and early spring trade is worth caring for as the people who eat honey late and early are the people who consume the bulk of our product.

There is little objection to carrying over extracted honey, as good extracted honey will keep well from one year to another. We consider it better to have to hold a little over than to have to refuse to fill orders for our good customers.

The amount of fruit produced has a great deal to do in regard to the time of year to sell honey. If there is a heavy fruit crop in a given locality

there will not be as heavy a trade for it as in a year when fruit is very scarce. When fruit is plentiful it pays to hold honey until the raw fruit is out of the way, then it becomes in good demand.

The matter of packages must be left with each individual beekeeper, some use glass and will use nothing else, some use tin and some use paper, while some use all three. After a trade is established it pays to stay with the package originally used as customers become accustomed to it and will buy more readily in a package they are used to seeing.

In Illinois and surrounding states during the last three years beekeepers have been bothered with honey dew. In 1909 we had something like 12,000 pounds of honey dew ourselves. We have some of this honey dew left yet as we have been in no hurry to sell it to bakers at the prices they are willing to pay. We find that poor honey like this will do more to ruin a local trade than almost anything else. It is very important in selling this kind to either personally explain just what it is or to put on each and every package an explanation as to its poor quality. Of course there are exceptions and as tastes vary widely, one will occasionally find customers who prefer honey dew to what we call really good honey.

Honey, as produced by the average beekeeper, varies more or less every year. This season we had seven different flavors from our seven different apiaries, each apiary furnishing a honey with a peculiar flavor of its own. This was true in spite of the fact that we extracted all of the honey dew early in July in order not to ruin our fall crop. Some beekeepers aim to sell the same grade of honey year after year. To obtain an even grade, several different kinds are oftentimes mixed, making a blend which remains practically the same each season. In selling to a city trade I should think this would be very important as people in the city do not understand why the honey of one package should have a different flavor from that of another.

Right here it should be said that one of the strongest arguments to the consumer is a statement that every different kind of flower produces a different flavored nectar. How many times, even right around home, we have come across people who make the remark

that they bought honey of Mr. Beekeeper which they knew was not pure, for it was dark and so strong they were sure Mr. Beekeeper put in too much flavoring. And then you turn around and the next man says, "I just that they bought honey of Mr. Bee-ducer, and I know it is not pure, he put in too much sugar and the honey has no taste." The explanation that nectar varies nearly as much as the fragrance of the bloom will set the doubter right practically every time.

In selling our crop we have always found that white honey, especially white clover, sold much more readily than any other kind while we have many customers who will have nothing but our amber fall honey from hearts-ease and Spanish needle, yet we have a much larger trade on white honey, either white clover or white alfalfa. No doubt this is caused by the fact that white clover and white alfalfa are more generally produced than any other kind, and the consumers are more used to the mild flavored article.

There is much more difficulty, however, in handling the white than in handling the amber. The amber may be melted and even if it does darken a little it makes no difference, but in handling either water white or light colored honey there is much danger in darkening when it is being liquefied. In some recent experiments it was found that honey which was kept warm over night after being liquefied turned considerably darker than that which was not liquefied. It is not to be wondered at, then, that much honey sold as white honey is complained of as being darker after it is received and liquefied by the consumer or dealer.

With us the crops since 1904 have been much below the average, excepting the season of 1908. In order to take care of our trade we have been buying western honey. While this has to be handled on a small margin, we figure that aside from the money we make in handling it, it pays us well to take care of our trade. When a bumper crop does come our trade will be large enough to enable us to sell our own product at a good price and with little trouble.

Pres. Dadant—This matter is now open for discussion.

Mr. Stone—If honey is kept hot over night, do you think that is what colors it, or the heating of it?

L. C. Dadant—When it is cooled quicker it does not color so much.

Mr. Stone—I liquefied some honey once that I could see some difference in color, and could not understand why it was.

Mr. Dadant—I was told that by a person who had made the experiment, that if honey was kept warm over night it would darken perceptibly.

Mr. Stone—You can't explain why it is so?

Mr. York—I think it makes quite a difference as to the degree of heat to which it has been raised, and then let it stand.

I want to commend this paper heartily; it agrees entirely with what I think the bee-keepers ought to do, that is, when they run out of honey, to buy it somewhere else and keep their customers supplied. A bee-keeper should never be out of honey if he has a demand worked up.

It may be your local trade is not familiar with the honey you buy somewhere else. When you come to extracting honey, you can get light colored honey from the West, and blend it with your amber-colored honey. You can easily do this, and thus double your crop at least.

I think it is a mistake for a bee-keeper to run out of honey and not be able to supply his regular customers. Even if he doesn't make so much on the honey, it is worth while to keep them supplied.

Election of Officers.

Mr. Dadant—The time has arrived for the election of officers. We will now proceed, if there are no objections.

Mr. Stone—I nominate Mr. C. P. Dadant for President for 1912.

A Member—I second the nomination.

Mr. Moore—I move that the rule be suspended and that the Secretary be instructed to cast the vote of this Association for Mr. Dadant.

Motion seconded and carried, and the vote of the Association cast for 1912 for Mr. Dadant for President.

Pres. Dadant—I wish to thank you for the honor you have done me. As I said in the opening session, I appreciated more than anything the fact that you sent me a telegram last year, when I was confined to my home, and

unable to be with you. It was wonderfully pleasant to receive it. I feel grateful for the re-election. I wish to say, however, that I don't propose to keep this very much longer, not more than next year. I think it should go in rotation among the members. There are plenty of good men in this Association. I think we can grow by doing this.

Pres. Dadant—How will you vote for First Vice-President?

Mr. Moore—As a slight token of our appreciation of the work done by Mr. Baxter, in helping to get our Foul Brood law, I move that the rules be suspended and that the Secretary cast the vote for Mr. Baxter for First Vice-President of this Association.

Mr. Baxter—May be somebody else wants it; give everybody a chance.

Mr. Pyles—I think Mr. Baxter is the only man in the room that wants the office of First Vice-President, and we want Mr. Baxter.

Mr. Stone—I want to say that the members of the Legislative Committee know something about what Mr. Baxter did. He is quiet about his work. If he were not in the room I would say more. We could always find Mr. Baxter somewhere around. If we were waiting for some committee to meet, or something of that kind, we would find Mr. Baxter off button-holing his representative, and he worked with them in a way that we heard about afterwards.

On one occasion I went to Chairman Shanahan, when we were waiting in the House for the session to be called. I asked him if he could do something to advance our bill at an early hour in that meeting. When I had said what I had to say, I noticed Mr. Chipfield was sitting in the second seat from him, and another man was between them. I didn't know that he was giving attention to what I had to say to Mr. Shanahan, and when I turned to leave, Mr. Chipfield said to Mr. Shanahan, "You should give these men that bill." Mr. Shanahan said to him, "What do you know about Foul Brood?"

He had been instructed by Mr. Baxter, so he knew all about it. He said to Mr. Shanahan, "I know this much, that if the bee-keepers don't get that bill, the bee-keeping of this State is going to be exterminated." Shanahan looked at him, and it had an influence

on him that he could not shake off. That was after our committee had met, and Mr. Baxter's influence was as strong as any man we have, and we cannot offer him any more than to give him this honorary office.

Mr. York—I would like to say a word for Mr. Baxter. I know quite a number of us tried to aid in getting the Foul Brood Bills passed, and it seems to me that Mr. Baxter did about the most effectual work, in so many different ways. I doubt if we would have gotten the Foul Brood Law if it had not been for his help. I am willing to put all the "blame" on Mr. Baxter I can!

Pres. Dadant—All in favor of the motion that the Secretary cast the ballot for Mr. Baxter for First Vice-President, say aye. It is unanimous.

Pres. Dadant—Nominations are now in order for other Vice-Presidents.

Mr. Kildow—I suggest that each voter write four names on a slip of paper, and that the four receiving the highest number be elected in the order in which they are nominated.

Pres. Dadant—Is that satisfactory to the meeting?

Mr. Moore—That has been the customary way of doing it.

Mr. Kildow—The resolution committee had in view the presenting of a resolution in praise of the work of the Legislative Committee, but in talking it over, and thinking it over, we decided not to do anything of the kind because it looked like patting ourselves on the back. We would be the people passing the resolution and thanking for the work. We would necessarily need to name some men that had helped in the work. We decided we would let everybody thank themselves and have done with it!

Pres. Dadant—We are all glad enough that it has been done.

A ballot being taken, the following were elected Vice-Presidents: Second, J. E. Pyles; Third, W. B. Moore; Fourth, Louis Werner; and Fifth, Aaron Coppin.

Pres. Dadant—The next in order will be the election of the Secretary and Treasurer.

Mr. Pyles—Before the election of the Secretary and Treasurer, it will be necessary to fix their salaries for this coming year. In view of the fact that Mr. Stone has served faithfully, willingly, and done a great deal of

work for the Association, if the Association is so fixed that it is possible to give him a larger salary than he has already received, I would be in favor of it. I am informed that we could pay him \$100. I move that the salary of the Secretary be \$100 for the coming year.

Motion seconded, put and carried.

Pres. Dadant—Do you wish to take any action on the salary of the Treasurer, either as to paying him the same amount, or increasing it?

Mr. Stone—I move that the amount be continued—\$25 a year.

Motion seconded, put and carried.

Pres. Dadant—The next in order will be the election of the Secretary. Is there any nomination for Secretary?

Mr. Baxter—I move that the President cast the ballot for Mr. Stone for Secretary for the ensuing year.

Motion seconded, put and carried.

Pres. Dadant—The next thing in order is the election of Treasurer.

Mr. Kildow—I move that the Secretary cast the ballot for our present Treasurer, Mr. Charles Becker.

Motion seconded, put and carried.

Pres. Dadant—We are open now for discussion.

Buying Honey to Sell Again.

Mr. York—I would like to go back again to Mr. L. C. Dadant's paper, and ask whether any here ever found that it was a good thing to get honey from other places to supply their home demand when they run out of their own crop?

Mr. Dadant—We would like to hear from some of our bee-keepers. I know of some who have bought honey to sell to their customers.

Mr. York—If there is no objection to it, I would like to know what the opinion is.

Pres. Dadant—Mr. Becker can give us information on this. What do you think of it, Mr. Becker?

Mr. Becker—I have been for the last ten years buying a good deal of honey, and especially of extracted honey. The best bargains that I have got, so far, were from the State of Michigan. I have bought it as low as 7 cents a pound, and as high as 8 1-3 cents. I always have to buy the honey just as soon as the producer gets it on the bees, because it goes rapidly. He generally has from ten to fifteen thousand pounds a year.

Of course, I suppose he gets some from his neighbors. This year his crop was short, and he wrote to me that he had only about 10,000 pounds of fine white clover honey. I bottle it up in four different sizes, and sell it to the stores here in Springfield.

I live 16 miles from the city, and of course it is considerable work. I have to make about six to eight trips in the fall and during the winter. The past summer I was not able to do it myself, still I had to make a little money some way, after spending my money for doctors' bills and hospital expenses.

I have sold this year, of extracted honey, 4,000 pounds. I have sold as high as 10,000 pounds right here in the city of Springfield, and if I were able to take care of my honey trade here, I could sell more, because some of the wholesale commission houses ship in honey from Cincinnati.

I passed a commission house this morning, and I saw about twenty-five or thirty boxes stored up there. I don't know what kind of honey it is—whether it is pure or not.

When the people have an objection to my honey at all it is because it granulates. I always tell them that is the only test of pure honey. You can't keep it from granulating.

I heat my honey even before going to the Fair. I have to because it begins to get "milky," and now it is as hard as a rock, almost, what I have left.

If you push extracted honey, and give the people a good article from year to year, and don't give them any cheap stuff and try to sell for a high price, you will increase your sale.

I took with me to the State Fair, this year, ten gallons of honey in gallon buckets. I sold it all at the Fair, and had to send home for five gallons more, and sold the entire fifteen. I had orders for six more before I left the Fair Grounds, and I believe that any one who has extracted honey to sell, if he is not near a large city and will go around to villages, he will have no difficulty in disposing of it.

Among the farmers I have a number of customers, and amongst them is a man of eighty years. He came to my house this fall for another five gallons of honey. He uses about fifteen gallons a year, and always buys in five gallon cans. I have a number of cus-

tomers that buy from twenty-five to forty gallons. I have even gone into Mr. Coppin's territory (so he tells me); I send two five gallon cans down there and the purchaser sent me the money. I sell it to them for 12½ cents a pound in five gallon cans, so you can see there is a little money in it, and as far as I am concerned, I enjoy it. I enjoy coming to the city of Springfield here and offering my honey, and they tell me when I don't get around that they had to get honey from somebody else. They say "If you had been around sooner I would have gotten some more honey of you." They have told me that if they bring any of my honey in and put it alongside this other honey, that the people won't buy the other when they see mine.

It is the honorable trading that we do with our customers that gives us the reputation and trade.

I sell an article that is pure and good, and that you can stand by.

I have sold honey and the honey would granulate. Possibly it would be to a new customer. This fall I gathered up a couple of cases of that kind that was granulated. I said to the customer, "Why don't you melt it?" And he replied, "I have not the time." I said to him, "Give it to me and I will melt it." And by doing that I sold them a great amount of honey at another time.

This makes a little work for me, but I would rather do that than to have my honey standing on the shelves here in Springfield unused. I want my honey to sell; I don't want it to stand around on the shelf.

Mr. Stone—I will have to relate a little of my experience.

It is a good deal like Mr. Becker's, only I don't have the time to spend to sell honey, except where it is called for by my customers. I never advertise in any way, only in having a little label I put on each bucket.

I sell most of my honey in five pound buckets, and if I have a year like last year, and I have a large call for honey, I send off somewhere and get honey.

I have sent as far west as Utah for it.

My customers mail me a post card telling me how many buckets they want. I sell all of my honey in that way without advertising at all or making an effort to sell any except just what is ordered.

Once in a while I run across Mr. Becker's customers; they say, "We have got tired of this honey and want yours." And some of my customers will say the same thing to Mr. Becker.

People get tired of honey of one kind, and sometimes when they make a change and get hold of a poorer article they imagine it is better.

Sometimes customers get white honey, and they say, "That is not pure honey." I say, "That is alfalfa honey."

I was in a barber shop one day waiting for my turn to come—about a week ago, and a man happened to be in there who was one of my customers. There were six or eight people in there, and one of them said to the other, "What is in that can there?" He replied, "It has honey in it." I saw that Mr. Dadant's name was on it. They went on talking. He says, "What do you pay for that?" "\$1.00 for five pound bucket." "That is cheap enough".

This customer of mine spoke up and said, "Here is another honey-man." I said, "Yes, I sell it in that same shape." When he got off one side he said to me, "Do you still sell at the price you did (75 cents)?" I told him I did. I said to this man, "Don't you say anything about the price that I furnish you honey for. I don't want to run in on this man's trade." He gave me an order for a bucket of honey.

The point I want to make is, the same as Mr. Becker, that if we furnish a strictly pure article, and are ready to stand behind it, and have our label on it, we can sell all the honey we try to sell.

When I had more honey than I thought my customers would take—when I had a big crop myself—I would load up my spring wagon—maybe 1,000 pounds, and bring it to the market, and by ten o'clock I would have it sold. There is no trouble whatever to sell honey.

I ran across a grocer one day, and said to him, "You don't want any honey, I guess; I see a lot of jars there the same size as I have." (I saw Mr. Becker's jars there.) "You are supplied." He said, "I know you; I will buy some of your honey, anyhow. What you taught me, I would not take \$300 for. Have you forgotten that? Don't you know when you were here about two years ago I had a lot of candied honey in jars which I could

not sell? The customers would bring it all back and say, 'That is not honey'; and you told me how to liquefy it, and all my honey I could then sell; it all went. I would not take \$300 not to know that. I will buy some of your honey for that."

You have only to treat the people "on the square," and you are bound to get the trade.

Mr. Becker—In regard to selling a good article of honey, I want to tell you a little experience one man had. This man lives at Taylorville. He had about 125 colonies of bees. He had sold a great deal of honey. Taylorville is quite a mining town, and this man had a fine trade. He was the one who put me "onto" getting my honey from Michigan. But he was not satisfied with a good thing, and he bought, one fall, a car lot of honey, and he got it pretty cheap.

There was another man there, a bee-keeper, that started me in bee-keeping about thirty years ago. His wife used to be a correspondent for the bee-keepers years ago. This man told me, "I am afraid he is spoiling his honey trade." This man gave me some of his honey; it was a thick yellow honey, very strong. I was told the next year after that, that he lost his trade. And the man told me himself afterwards, how he had one hundred and twenty odd colonies in the fall to go into winter quarters. He fed the bees this honey. He took me out to the place in the spring and showed me the pile of hives he had. He had burned up all but the frames, and had fifty colonies left. He was dealing in hives and supplies. He happened to have plenty of hives; he transferred the others and put them into new hives, and he had a pretty fair honey crop; but the past summer he told me he didn't have any bees at all; that they were all dead.

Now, my advice is this: If you are sending off for honey, don't feed it to your bees. I won't feed an ounce of honey that I buy anywhere to my bees. If I can't sell it, it will stay there; I won't feed it to the bees, because we don't know what kind of bees this honey came from; and we are liable to ruin our whole apiary by feeding honey that is shipped in.

Mr. Baxter—I have had no experience in buying honey to supply my customers, but I have had a great deal

of experience in selling to bee-keepers. I have sold probably four-fifths of my table honey to bee-keepers. I have bee-keepers today in New Jersey, Pennsylvania, West Virginia, Ohio, writing to me for honey that I sold to twenty years ago. Certainly they must have found it profitable to buy and supply their customers.

Another thing, we want to be square with one another—we bee-keepers in the same locality; we want to "act on the square" with each other. For instance: I occupy the same territory that Mr. Dadant does, and other bee-keepers. He will sell to the same family, and they will be satisfied, and then I may find a dissatisfied customer. They will say, "I don't like Mr. Dadant's honey; it is adulterated." And I ask them why they think it is adulterated; and they reply, "Because it is candied; it don't taste good." I say, "You can't buy any adulterated honey from Mr. Dadant."

And it is the same with other bee-keepers in my neighborhood. I find some other customers who don't like some honey that has been sold to them, they complain about its not being pure, and you have to be honest with those people and tell them that that man does not sell adulterated honey.

And you should try to agree on a price and not undersell in disposing of your honey. The world is wide enough, there are plenty to whom to sell your honey and you will have your customers as long as you live if you treat them right.

Mr. Roberts—I agree with Mr. Baxter. I think the beekeepers can do a great deal to injure, and also to help one another. I had a case where a man bought a case of section honey cheap. As I was going by on the street he said to me "Roberts, come in here. A man cheated me in selling this honey, it is not fit to eat. I want to get some from you." I looked at it and said, "That is just as good as mine; that is just as healthful as mine." He had said to me, "I will have that man arrested, he has sold me honey that is not fit to eat," but I told him it was just as good as mine, and if I had encouraged that man a little bit he would have sued the other man for the price of the case of honey. I inquired who the man was and found that he was as honest a man as ever lived.

Anatomical Bee Models and Lectures.

Mr. Moore—Most of you have noticed the bee models I have here. I got them some time ago, when I gave a lecture before the zoology class in our high school. If there are any of you who think of doing anything of the sort I would advise you to get some of these models. You can give the pupils an idea of the anatomy of the bee better by using these than by any talk you may give them; this is complete—for both the queen and the drone.

While we are talking on the line of honey, I will say that in this lecture I brought out quite prominently before those pupils the change that takes place in the honey, why it was a so much more healthful food than any sugar they could eat.

If beekeepers could give those lectures to the children it would tend to create an interest amongst them in the honey bee, and educate them in the line of what honey is as a food, and there would be more demand for honey. The children would ask their papas, "Why don't you get some honey? There was a man who gave a lecture at the school and he said it was such a healthful food." And this would tend to make the parents have it on the table; it would create a demand for it.

Mr. Baxter—I have been asked by our high school principal to give a lecture on bees. I did not feel that I could give the lecture, but maybe by getting these models and studying them, I might give something along that line.

Mr. Moore—These are gotten out by the Gleanings' people. They are 75 cents the pair; 50 cents for either one alone.

Pres. Dadant—I want to say that there is credit due to the A. I. Root Company, not only have they produced these in this country, but they have been translated into French; I have seen them published in Europe. These are really doing a great deal of good on both continents. The beekeepers ought to take hold of this matter, and inform their neighbors. And these matters ought to be brought up in the schools, and we should have a study in the schools along this line.

When we went before the Governor, we mentioned to him that there was no school of bee culture. He said to us, "We ought to have the study of apiculture in our college, that is a

thing that would be very good." That was the suggestion of Governor Deneen.

I believe that sooner or later we must push that point, and I think we can if we will unite and in the course of time get what we need, discuss the matter and bring it before the legislature.

Mr. Baxter—I have taken up that matter with Mr. Davenport of the Agriculture College already. I was there last spring. I went back with the committee when they were here before the legislature, and Mr. Davenport, who has the management of the books, showed me all their accounts, this was in the fore part of May or the latter part of April, and he showed me that they didn't have enough money then to run the Agricultural College to the end of the fiscal year. He said, "Mr. Baxter, it is impossible for us to take this up, our appropriations were cut down. Just as soon as we have funds we intend to do that."

When I appeared before the committee, I suggested that we do like Michigan—have a permanent fund for the University. Well, I see the legislature acted along that line and passed a law establishing a tax of one mill on the assessed valuation of this state as a fund for the University, and so now, I think that they will be in a position to take it up. I expect to attend the State Horticultural meeting week after next, and I will take the matter up again with Mr. Davenport, and see if something cannot be done in the near future. I think this Association should take hold of the matter and push it. We want to show Mr. Davenport and the authorities there the possibilities of obtaining a knowledge of apiculture for the young men engaged in the agricultural college work. There are thousands of tons of honey going to waste in good seasons all over the country. If these young men who go to the agricultural college would go away from there practical apiarists, they could add to their income immensely.

L. C. Dadant—Would it not be a good thing for the Committee on Resolutions to adopt such a resolution?

Pres. Dadant—Is it the wish of this meeting to take action on that?

Mr. York—I was going to say something about the State Horticultural Society—it seems to me they ought to have beekeeping on their program.

Mr. Baxter—For years they have been very indifferent, Mr. York, but they are coming to it.

Mr. Moore—One year I brought out in this lecture at home the importance of the honey bee in regard to the fertilization of fruit bloom.

Report of Auditing Committee.

Pres. Dadant—We will have the report of the Auditing Committee:

We, the Auditing Committee, find in the hands of Treasurer, Charles Becker, \$925.28 in the State Fund, and \$234.94 in the Association Fund, or a total of \$1,160.22, as shown by his accounts.

We would suggest that hereafter the Treasurer keep these two accounts separate, starting with the above amounts.

We would also suggest that hereafter the Secretary keep only the "Association Fund" account, and start now with \$234.94 balance, as shown on his books, which amount is in the hands of the Treasurer.

The Secretary, in drawing orders, shall stamp them (with rubber stamp) in large letters the words "Association Fund," or "State Funds," as the case may be, using a separate order book for each fund.

W. B. MOORE,

A. L. KILDOW,

GEORGE W. YORK,

Committee.

Bee-Keeping at the State University.

Pres. Dadant—Here is a resolution that is presented:

The Illinois State Bee-Keepers' Association in convention assembled, recognizing the great possibilities of bee-keeping as a means of livelihood in this State, and also recognizing the great importance of bees in the fertilization of our fruits and many of our other crops, therefore, the Association most earnestly petition the Board of Trustees of the State University of Illinois to establish an Apiarian Department at the University, where practical bee-keeping will be taught; bee-diseases and their remedies or prevention studied, and everything pertaining to the advancement of apiculture.

A copy of this resolution shall be sent to the President of the Board of Trustees of the University of Illinois, and also to the Dean of the Agricultural College.

The above resolution presented by Mr. Baxter.

Pres. Dadant—What will you do with this resolution?

Mr. Moore—I move that the resolution be adopted.

Motion seconded.

Mr. Baxter—Ought not another copy

of this resolution be transmitted to the Board of the University?

Pres. Dadant—All right—put that in.

Mr. Baxter—Also one to the Dean of the Agricultural College.

Pres. Dadant—All those in favor of the resolution, with these suggestions added, signify it by saying Aye. Contrary, No.

Motion carried.

Honey From Foul-Broody Colonies.

Pres. Dadant—Here is a question that will be very interesting: "Ought bee-keepers to be allowed to ship and sell honey from a foul-broody colony?"

Mr. Kildow—No.

Mr. Baxter—Those are my sentiments.

Mr. Stone—That word "honey" was stricken out of our Foul Brood Bill right at the beginning. I got a letter of about three pages, right away after it had been offered, stating we had the word "honey" in there along with apiarian implements, and if it remained we could not sell our honey if any foul brood appeared in our apiary.

Pres. Dadant—There is a difference; forbidding the shipping of honey where foul brood exists condemns all the honey. But in this case, "should bee-keepers be allowed to ship and sell honey from a foul broody colony?"

You would prevent a man with only one colony diseased from selling any of his honey.

Mr. Moore—It would be quite a hardship on a man who had a big apiary, to stop the sale of his entire honey crop because he had only one colony that was infected with foul brood. It would be a pretty hard matter, unless this man were strictly honest, to prove it on him. If he has taken off extracted honey from one colony that had foul brood, it would all go in together. You would not know whether he was selling it or not. Morally, it is wrong to sell any honey from a foul-broody colony.

Mr. Kildow—There should not be any sold or put upon the market in any way. The chances are you would spread the disease by selling any of it.

Mr. York—If you sold it in the city where there were no bees at all, it would not.

Mr. Kildow—There are apiaries in the city, are there not?

Mr. York—Not very many right in a town as large as Chicago.

Mr. Baxter—That may be so in cities like Chicago; but in towns of thirty or forty thousand inhabitants, they have bees on the outskirts of the town.

L. C. Dadant—If the Illinois bee-keepers had to do that you could not keep honey from being sold from other States outside of Illinois, where some of the colonies were infected with foul-brood germs as much as those in Illinois. You could not prevent this being done. Really, that is what we ought to do, on every shipment that is made; but we should have the laws the same in every State.

Mr. Coppin—Any of you here who bought honey would not let your bees get to the honey that you buy.

L. C. Dadant—If you sell some of that honey that you have bought, you don't know whether it is foul-broody or not. You take a family that uses, say three-quarters of a bucket of honey, and they take a notion they don't want the rest of it, and throw it out; you don't know whether your bees will get any of that honey or not.

Mr. Coppin—On the other hand, should you be restricted from shipping and selling any of your honey because you may have foul brood in your apiary?

Mr. Kildow—I think we all agree it should not be sold from a foul-broody colony.

Pres. Dadant—From the acknowledgment of the men in charge of the Department of Agriculture, they have not yet been able to locate the germ of the European foul brood. They thought they had it, but they didn't. An examination on their part would be absolutely void; that is to say, the examination would not give results, because they have not traced the disease to any germ as yet.

In the case of American foul brood, they have been able to find the bacillus in the larvae. But when we go to Cheshire, the English writer, we find he was convinced the disease was not in the honey, because microscopical examinations did not show any of those bacilli in the honey. The microscopical examinations can only be on a very small amount; you may have fifty samples and not have a single bacillus in those samples, and yet if fed to a colony of bees there may be numerous germs in it that have not been detected in the microscopical examination. As

to an analysis, there is nothing in that. We should confine ourselves to the question, whether the honey should be shipped from colonies that are known to be diseased. I think in this question we have a very important topic.

Mr. Stone—It would not do any good to take any action on that without we tried to get a bill in the Legislature.

Pres. Dadant—Then we could not enforce it very well. I think the action on our part should be to take a vote showing what our sentiment is; this would have more effect on bee-keepers than anything I think we might do. Something like a resolution. What are your wishes in the matter?

Mr. York—Is it safe to eat it?

Mr. Kildow—I don't want to eat it.

Mr. York—Is it not healthy?

Mr. Coppin—I have eaten lots of it; it has not killed me yet!

Mr. Kildow—I wrote to Dr. Phillips this fall, asking him about it, and if he had anything definite on European foul brood, and he overlooked my letter—I did not get any answer as to whether he found anything or not.

Pres. Dadant—I asked him the question personally at Minneapolis. He was not either able to give a distinct difference between European foul brood and pickled brood—that is, a difference which **any one** could detect.

Mr. Kildow—I wrote inquiring about samples that I sent him, making the inquiry as to whether or not he had come to any positive conclusion as to what caused European foul brood. I think he must have overlooked it. I never got an answer.

Pres. Dadant—He has nothing to give you, or you would have heard from him. Well, I think it is desirable that bee-keepers should not (and I think it ought to be made compulsory) sell honey from diseased colonies, but I don't see that it is a practical question, because I do not see how you can prevent a man from doing so under our present methods of treating bee-diseases.

Mr. Moore—The question of selling honey from foul-broody colonies depends upon the morality or honesty of the bee-keeper who has it—whether he believes he should do unto others as he would have them do unto him. That is the whole question. I don't think it is possible to control it by legislation.

or to do anything with it by way of education.

Mr. Baxter—It would be well to have the bee-keepers where there is no foul brood to be very careful about importing honey that has been taken from foul-broody colonies. Try to work up a local market for your honey that you know is all right, and try to have no foreign honey come into that locality, and if it does, have it in such shape that your bees can't get hold of it.

I have seen families buy honey, and take it out of the sections, and leave a lot of honey sticking to the sides of the sections, and then throw it out of doors. If there is any disease in the sections at all, it is very likely your bees will get hold of it. We ought to try to get them to burn up those sections. In our locality I have always cautioned people not to expose anything of that kind, but to destroy it, and never feed foreign honey to the bees—honey that you do not know definitely about; instead, feed them sugar syrup.

Mr. Stone—On this question that is up for discussion, can this Association do anything more than to vote "yes" or "no"? I think that all we can do is to vote, unanimously, No.

Mr. Baxter—I think we ought to go on record as saying that we are all opposed to selling honey from diseased colonies. I will make a motion to that effect.

Pres. Dadant—The motion is, that the members of this Association are opposed to selling honey from a diseased colony. All in favor of such a motion, say aye; contrary, no.

Motion carried.

Mr. Roberts—I would like to ask you about one particular instance: A man that used to live in Illinois moved to Indiana. He has twenty-five or thirty colonies of bees, and they are, I believe, diseased. He wants to move back into Iroquois county, and bring them amongst us. I told him he would have to get a certificate from the inspector in Indiana before he could do that. How would you act on that?

Mr. Moore—You can stop him from bringing the bees in if they are diseased.

At 11:30 a. m., on motion, the convention adjourned sine die, to meet again in 1912, at the call of the Executive Committee.



1st Front Row (from left to right)—1 W. B. Moore, 2 L. E. Pyles, 3 James A. Stone, 4 C. P. Dadant, 5 Chas. Becker, 6 E. J. Baxter, 7 Louis Werner.

2d Row (from left to right)—8 G. M. Withrow, 9 Geo. W. York, 10 Miss L. M. Stewart, 11 L. C. Dadant, 12 Jesse H. Roberts, 13 Aaron Coppin, 14 Mrs. Kildow.

3d Row (from left to right)—15 Chas. Hastings, 16 John Sauer, 17 A. L. Kildow.

THE 32D ANNUAL CONVENTION OF THE **Chicago-Northwestern Bee-Keepers' Association**

HELD AT THE

Great Northern Hotel, Chicago, December 6 and 7, 1911.

Was called to order at 10:30 a. m., December 6th. the President, Mr. George W. York, in the chair.

Pres. York—Let us stand while Dr. Miller opens the convention with prayer.

Dr. C. C. Miller—Our Heavenly Father, we recognize in Thee the being who takes care of the highest interests of the world, who takes care of the tiniest insect; and now we, as bee-keepers, have come together to talk about our mutual interests, and we pray that Thy blessing may be upon us; that we may have the right feeling toward one another; take selfishness out of our hearts, and may we be sincerely desirous that the others shall be benefited, as well as ourselves. Bless us in all that is done, forgive our sins, and finally receive us, we ask in Christ's name, Amen.

Pres. York—If I mistake not, this is the 32d annual convention of the Chicago-Northwestern Bee-Keepers' Association. Dr. Miller was the first president and the only president, I believe, for a number of years, of the old Northwestern Bee-Keepers' Society. Is that right, Dr. Miller?

Dr. Miller—There was a temporary president at the first meeting. I cannot think of his name this minute.

Pres. York—That was probably thirty years ago, when the "Northwestern" met in Chicago for a number of years, and was, I suppose, ahead of the National Society in attendance, and perhaps in interest as well. Then, for a number of years, "the Northwest-

ern" "went out of business," and we had no convention in Chicago, or else it combined with the Illinois State Association. Then, finally, in 1898, we organized the Chicago Bee-Keepers' Association, and a few years after that added the word "Northwestern" so as to bring in the former society, and since then it has been called the "Chicago-Northwestern Bee-Keepers' Association," and this is our meeting for 1911.

The Secretary has prepared a program, although he has not divided it into sessions; but we, perhaps, can take up something in a general way first, then have an intermission for the reception of dues by the Secretary, and then go on with the program. Perhaps it would be just as well to have the Secretary's report, if he has it ready—the minutes of the last meeting.

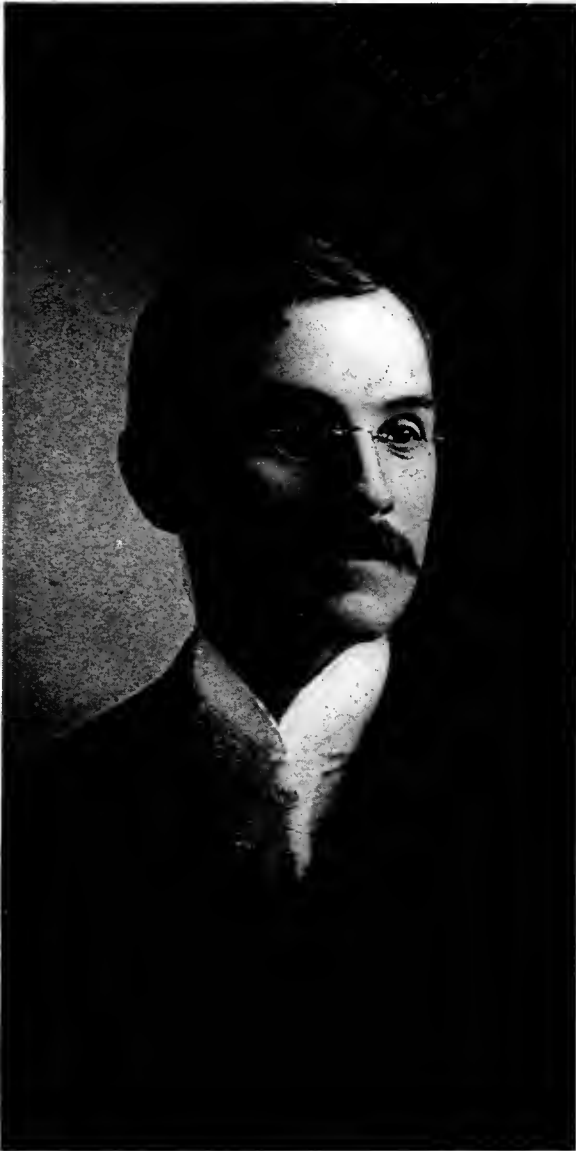
The Secretary, Mr. L. C. Dadant, then read the minutes.

Pres. York—Are there any corrections in the minutes? If not, they will stand approved as read. We might now have the Treasurer's report. Mr. Dadant is also Treasurer.

The Treasurer, Mr. Dadant, then read the Treasurer's report.

Pres. York—You have heard the Treasurer's report. What will we do with it? It shows a shortage of \$4.26, but I suppose that will come in during the day in the shape of dues.

Dr. Miller—I would suggest—I think a motion is hardly necessary—an Auditing Committee. If I were in the Treasurer's place, I certainly would desire it.



GEORGE W. YORK,

President Chicago-Northwestern Bee-Keepers' Association, also President of the National.

Pres. York—You don't make it as a motion that an Auditing Committee be appointed?

Dr. Miller—I make it a motion that an Auditing Committee be appointed.

Motion seconded; was put and carried.

Pres. York—I will appoint on that committee, Mr. Stone, Mr. Dittmer, and Mr. Huffman.

Jas. A. Stone—Am I not a member of the Chicago-Northwestern, and would I be accepted on that committee? I am willing to pay my fee. I am a member of the National.

Dr. Miller—Auditing committees are generally taken from the outside!

Jacob Huffman—I would suggest that, if Mr. Stone is not a member, they quite often pay before they go into any office or any business, and, therefore, become a member anyway.

Pres. York—He will be a member before he is through, probably.

Mr. Stone—How much am I to pay?

Pres. York—That will be settled soon. That is a question for us to take up, and perhaps now is as good a time as any to decide what we will do for the future as to dues, and also joining the National Association. I think the Secretary ought to have his instructions as to the amount to receive for dues before he receives any more dues.

Sec. Dadant—We cannot go by anything except the instructions we had at the last meeting. If we want to change our dues after this year, it will be all right, but the minutes of the last meeting say plainly that the dues of the Association be increased to \$1.50 a year, except those who are already members of the National, and those



LOUIS C. DADANT,

Secretary Chicago-Northwestern Bee-Keepers' Association.

will pay \$1.00; so there is no doubt as to what they are to pay. If they are members of the National, they pay \$1.00, otherwise \$1.50.

Pres. York—The only question is as to whether we shall join the National in a body.

Dr. Miller—I move that we join the National in a body.

Mr. Huffman—Seconded.

Pres. York—The new constitution raises the dues in the National to \$1.50, or \$1.00 from associations that join in a body, instead of 50 cents. That will make a little difference now.

C. F. Kannenberg—Didn't we carry a resolution last year that we were going to raise our dues from \$1.00 to \$1.50, and that was laid over to this year to adopt it?

Pres. York—That was done last year. You are speaking of the year before. That was decided last year, so our dues are now \$1.50; but on account of the change of dues of the National, we shall have to pay them \$1.00 now, instead of 50 cents per member. The new constitution of the National says that any association joining in a body will have to pay \$1.00 for each member, instead of 50 cents.

Mr. Huffman—As I understand the treasurer, he claims that this Association has to pay 50 cents per member to become a member of the Illinois State; then, with the dues being raised in the National to \$1.00, that would mean \$1.50 for this Association to pay out direct. Then what have they got in the treasury?

Pres. York—Nothing.

Mr. Huffman—I think that is a question to consider. I didn't understand it when I seconded the motion, or I would not have seconded it.

Pres. York—That is what I thought. It is quite a serious question, for if we pay \$1.00 to the National, and 50 cents to the Illinois State Association, it leaves nothing for the expenses of this Association, because our dues are just \$1.50.

Of course, if we join the Illinois State Association in a body, no matter where the member lives, he will get all the advantages; receive the published report, etc.

C. P. Dadant—There is a question which I wish to put, that ought to be solved by men who are well acquainted with our State laws. Would it be possible for this Association, being a member of the State Association, to send its money to the State Association and have its expenses paid out of the State Association funds? If this could be done, then the amount of dues (\$1.50) would be sufficient; because if we pay it into the State Association (if we are a branch of the Illinois State Association), it seems that it would be rational to have our

expenses paid out of their treasury. You will note that it has already been adjudged proper for the State Secretary to pay the Secretary of this Association to help to have a Foul Brood law—that is to say, for placing before the Legislature the sentiments of the members of this Association at the expense of the State Association. The amount paid by Mr. Stone for postage for this Association was simply because this Association, as a branch of the State Association, helped to get the Illinois Foul Brood law. Now, it is for us, or perhaps some person versed in the laws, to decide, whether it would be advisable for this Association to act as a branch, and pay over our money to the State, and let the State pay our expenses.

Mr. Kannenberg—Inasmuch as the State Association has paid some of the expenses, we will then have to be considered as one of the babies that belong to the State Association, and then, of course, we will have nothing to do with the expenses at all; the State pays our expenses, and that is the same as if we belonged to the State.

Pres. York—It seems to me that the Chicago-Northwestern Bee-Keepers' Association does not want to feel that it is a part of the Illinois State Association, although, in a sense, it is; because the Chicago-Northwestern Bee-Keepers' Association includes Michigan, Wisconsin, Indiana, and the other surrounding States. It is all right for us to join the Illinois State Association in a body, as we have done, because we get the advantage of the Report, and they pay for this report of the Chicago-Northwestern Bee-Keepers' Association, and publish it with theirs. That is the only reason we joined the Illinois State Association. If they did not pay for publishing this report, we would not have any published report at all. Of course, they like to have us join, so as to increase their membership. We like to belong because of the advantage we get. But I don't think we ought to give out very emphatically that we are simply a small part of the Illinois State Association, when we take in bee-keepers from Michigan, Iowa, Indiana, etc.

Mr. Stone—In regard to the membership outside of the State, there isn't very much of it. The membership

of the Chicago-Northwestern is principally in Illinois, and many of them are near Chicago; and when it comes to the expenses being paid, as Mr. Dadant suggests, the amount referred to was for postage. It was not the Secretary's salary. Our State law does not allow anything for salaried officers. The State Association dues pay our Secretary's salary, and we are not allowed to pay any salaries from the fund voted by the Legislature.

Sec. Dadant—There is no salary expense here for the Secretary.

Pres. York—Secretary Dadant does not get any salary.

Mr. Stone—His expenses that are caused by postage and the like of that can come out of the State fund as a branch of the State Association. The State Horticultural Society has an appropriation made to it for publishing its report, and they get a big appropriation. I knew when it was \$6,000.00, and I think it is more than that now. They publish a report—it is a large book of three or four hundred pages—and along with that report they publish the reports of the horticultural societies from the three districts of the State, the Northern, Central, and Southern; those reports are all published together, and the expense comes out of the State treasury, and they also pay their Secretary a salary of \$400.00, and that is allowed in the bill. But we offered our bill in that way so as to be sure to secure it, and to let the representatives know that there was nothing going for salaries, and then we could stand up before them and talk as we could not talk if we were having a salary included. I don't see but what that can be arranged this way all right—all the expenses for postage and everything except the Secretary's salary. If he receives any salary, which he ought to do, that could not be paid unless we would have money in our Association fund, aside from the State fund.

Dr. Miller—There seem to be several things to be kept in view. The one thing already mentioned is, I take it, a matter more or less of the feelings of outsiders, and I think they should feel perfectly at liberty to express themselves upon this. I think that the outsiders—for instance, those barbarians from the State of Wisconsin—will not feel very thin-skinned about that;

if there is something that can be done for the benefit of bee-keepers in general, I don't believe that they would be very touchy about a name. Now, if this Association is affiliated with the State Association, even if you say it comes under its wing—put it in that way, if necessary—that helps the influence of the State Association in getting laws and getting appropriations. You know that bee-keepers in general are not selfish. If there is something that is for the general good, they are for it; if it is against the general good, they are fornenst it. The same thing applies to joining as an Association with the National. Now, I should feel very sorry indeed, if we could not as a body unite with the National, because if you do not do that, you will cut off quite a number from the National. If you must join this Association and the National separately, you may count on it you will not get the same number. The larger and the stronger we can have the State and the National, and all the different State associations, the more power you have to work upon legislatures and the public as bee-keepers, and that is what we want; we want them to feel that we amount to something, and that when we ask for something our request should be considered. I consider it of the very first importance to increase the number and power of both these associations—the National and the State Association; and if we can make money out of it, we certainly want to unite with the State; and, as Mr. Stone puts it, it rather looks as if we might make a little money out of it, if the State Association will stand back of us and say, "We will pay your expenses", and I understand from Mr. Stone that practically it amounts to that. If they will stand back of us, and say that, by all means we ought to join the State as a body.

Mr. Stone—I will make one more point on that. Dr. Miller has touched on it. When we secured our law it was for the purpose of paying the running of the State Association and publishing its report. We first secured a bill of \$500 and then, when it was increased to \$1,000, the extermination of foul brood was attached to it. We get the \$1,000 still, and in the omnibus bill there is \$1,500 put to the foul brood part of it. We do not use over \$600 in publishing our report, and we are

going to have accumulating every year as much as \$400 unless our foul brood inspectors can use it. We know that we can do it because our bill is put that way for the purpose of suppressing foul brood in the State of Illinois, and no one can keep us from paying it for that if we want to, although the way the law was made and the State Inspector appointed by the Governor, he cannot force us to pay any of that money to him under that law because he is a governor-appointed officer, and our appropriation money is made to a private corporation.

Dr. Miller—Perhaps it is not entirely fair to do anything in the line of forestalling the expression of opinion of others, and I see there are at least two or three men here from Wisconsin that I know are loyal to their own State, and I would be glad to have an expression of opinion from them if I can obtain it.

Pres. York—We have Mr. Jones, Mr. Dittmer and Mr. Huffman.

Gus Dittmer—I can say for myself that Dr. Miller has expressed the sentiment that we can all endorse. We are not here—at least, I can say for myself, representing Wisconsin (for the State Bee-Keepers' Association of Wisconsin)—I am here as an individual bee-keeper to get what benefit I can out of this convention in a social way, and in other ways. I am entirely willing to leave this matter to the Illinois bee-keepers; whether it costs me 50 cents more or less, that doesn't count. Anything that they do will be agreeable so far as I am concerned, and I am sure it will be the same with Mr. Huffman.

Mr. Huffman—I have to agree with Dr. Miller that he has expressed my views, for this reason: When we join this Association, we outside of the State are not going to stay out of the State and keep you out. If we join here and there, we get the benefit of the two Associations. We have a little money in store, and if anything happens we have something to fall back upon; and I am ready and willing. As I now understand it, in regard to what they have to pay to the National, you would get nothing; and I would say that this Association should increase 25 cents or more if you want it. You must have something

to do your business with in this Association.

Geo. W. Jones—I would say ditto to what Mr. Huffman and Mr. Dittmer have expressed.

Mr. Kannenberg—Will the Secretary tell us what expenses we have in this Association and whether we can get along with 25 cents added to the \$1.50?

Sec. Dadant—Last year we had \$20 hall rent to pay. This year we will not have any. Our expenses outside of that have been about \$20 for postage and stationery, and it has been a little heavier this year because we saw fit to help the State Association in getting their State law, and we did more correspondence than we usually do.

Mr. Kannenberg—As I understand, the postage on that was paid by the State Association.

Sec. Dadant—We paid for the stationery, envelopes, etc.

Mr. Kannenberg—Aside from that, \$20 would not reach it.

Mr. Stone—There is no man going to pay any more dues.

Mr. Huffman—There is one thing that Mr. Dadant read in his report with regard to the members outside of the State joining for \$1.00.

Sec. Dadant—The minutes say that the dues of the Association be increased to \$1.50. They were formerly \$1.00, but our dues are now \$1.50, except those already members of the National, and their dues shall be \$1.00 here.

Dr. Miller—There is one point on which I am not entirely clear. We have now \$1.50; we are to pay \$1.00 to the National, and I suppose we pay 50 cents to the State—If we can get our expenses out of the State treasury, we are all square still. Don't you think we can do that, Mr. Stone?

Mr. Stone—I don't see any difficulty about that. It can be brought in as stationery and expenses of running the Secretary's office.

Sec. Dadant—How about hall rent?

Mr. Stone—That could be paid, too—anything but a salary—anything to run a meeting. We have paid delegates' expenses in that way, because they were on the program. The appropriation is for that—to pay the expenses of the meetings and publishing a Report.

C. P. Dadant—This matter is worth discussing. The present condition of

the National, under the new Constitution, is going to make these matters important; if the National grows as it is expected; if it is going to have delegates and power from the membership of the State Association, of the affiliated associations—it is important for us to belong somewhere where we know we will be represented. This Chicago-Northwestern Association is an association for the discussion of the interests of bee-keepers, but not for real action in vital matters. We could take action in vital matters by simply sending men from here to the State Association to see that the views of this Association were represented. So, I believe, if we waste (?) half a day on this, it will be well spent time, and we ought to consider it in all its phases before we decide on it. It struck me, as this matter was brought up today, the possibility of the State Association paying the expenses of this Association; but the more it is discussed, the more feasible it seems to me, and I hope those of you who have any questions at all will put them. We ought not to act without due thought.

Sec. Dadant—Do I understand that the State Association has plenty of funds to meet these expenses?

Mr. Stone—Yes, and accumulating in the treasury.

C. P. Dadant—There are two points here to consider. The State Association has funds from the State which can be used for the benefit of bee-keepers, but not for paying salaries. I am President of the State Association. We, as officials of a chartered association supported by the State, get no salary whatever. The salary that we pay Mr. Stone as Secretary comes out of the dues paid by the bee-keepers, and not from the amount paid by the State, so we cannot go beyond the amount of money paid by our members in order to pay Mr. Stone. Then we can say, when we go to the Legislature, there are no salaries paid by the State for the Association. We will have to do the same as to this Association. It is not necessary at present to pay a salary, but should it become necessary, it could not come out of the State funds. It is very proper, because the State wishes to help the bee-keepers along, and not a coterie of men who will look at their own interests and not help the general public of

bee-keepers. I believe that those matters are very important, and that we are running in the right direction if we keep within the terms of the law.

Mr. Stone—Before the question is put, there is one point that has not been touched upon at all. As Secretary, I was instructed to send out notices just as soon as we found out whether the National had adopted the new Constitution, and the notices were to read, that any member who joined the State Association before the first day of January (when the new Constitution would take effect), the fee would still be \$1.00 for one year, which would entitle to membership in the State and National both for one year, provided they joined before January 1st. The Secretary was ordered to do that.

Now, then, if this Association wants to join the State Association in a body, they can still join it for \$1.00, and 50 cents of it would go to the National; this would hold good to the first of January. If our President, who is also President of the National, rules that that is right, it is right; and if he rules it is not right, it is not right; and we will have to put on the brakes and call a halt, and take back the notice that we have already put in the American Bee Journal for December, as I understand Mr. York, and that all who join before the first of January, their fee will be \$1.00 for the State and National both.

C. P. Dadant—There is a difference that probably Mr. Stone doesn't realize. When the Illinois State meeting took place (in November) there was nothing to prove the constitution would be accepted; therefore it was all right to provide for sending out the notices as he has suggested; but today we know that the constitution is accepted, and to my notion this Association would be acting falsely so far as the National is concerned, in taking advantage of some twenty-five days, to get it at low prices, when we know the prices are to be raised. I believe that conditions are different, with the meeting held **before** the new constitution was actually adopted, and this one, when we know for a certainty that it has been approved and adopted.

Mr. Stone—I took that stand at the State Association; that it looked as if we were trying to crawl in and take advantage of the National, and Mr.

York held it would not be that way at all, and that we would be acting in good faith.

Dr. Miller—Yesterday I sent to the Youth's Companion \$3.50 for a two years' subscription for my mother-in-law. If I had waited until the first of the year, I would have had to pay another 50 cents. That is a thing that is counted fair, to get your subscription in before a certain time, with all the papers. It seems to me it is rather a parallel case here. I don't see that there is anything unfair about it; I would say it is a parallel case.

Mr. Stone—That is the way they decided at Springfield.

Pres. York—I might say right here, that the new constitution of the National does not go into effect until January 1, 1912. We are now under the old constitution, which says they will accept members at 50 cents each when joining in a body. The first of January the old constitution passes away, and the new constitution takes effect, so if any one can get in before the first of January at the old rate, I think he is acting legitimately in so doing.

After some further discussion the motion to join the National in a body was put and carried.

Dr. Miller—I move that we also join the State Association in a body.

Pres. York—I think the State Association has already taken action that they will accept any local Association at 50 cents a member when they join in a body. So that all we need to do is to pass a motion that we accept their proposition.

C. P. Dadant—I suggest that we become a member of the State Association in such a way that they will pay our expenses; this would have to be approved by the State Association; it seems to me an Executive Committee would hardly have the power to pay the expenses of this Association unless this Association requests it, and a vote be taken upon it. I would like to hear from Mr. Stone.

Mr. Stone—If they accept the offer of the State Association, and send in members at 50 cents each, that entitles them to a membership, and any branch of bee-keepers anywhere are just as liable to have their expenses paid as the Illinois State.

C. P. Dadant—In your opinion it requires that this Association get their expenses paid, except salaries?

Mr. Stone—Yes, sir. The Horticultural Societies throughout the State, where they are members of their District Association, the reports are passed along with the State report, and their program is paid for. All the expenses are paid, the same as they are for the State Association, except their Secretary does not get a salary. There is a salary that the State Horticultural Secretary gets, by law.

Dr. Miller—In any case, I don't see where we are going to get into any trouble, because, coming in a little ahead of time, we are going to have half a dollar left in the treasury, anyhow.

Mr. Stone—It will fall into the treasury of the Chicago-Northwestern.

Pres. York—You don't save anything in joining the State Association—just the National.

Dr. Miller—It will leave us how much extra?

Pres. York—50 cents.

Dr. Miller—Won't that cover expenses?

Pres. York—Yes.

Mr. Stone—If they pay \$1.50 coming in here and your Secretary pays \$1.00 to the State Association, that will pay your membership in the National and the State, and you will retain that 50 cents in your Chicago-Northwestern Treasury until Jan. 1, 1912; after that you have to send \$1.00 to the National for each member joining after that date.

Pres. York—The Secretary is not going to send \$1.00 to the State; we voted to send 50 cents to the National and now we are voting to send 50 cents to the State.

Pres. York—The question, then, is, shall we join the Illinois State Association in a body at the 50 cent rate which is offered by the State Association?

The motion was put and carried.

Pres. York—The Secretary will then send 50 cents per member to the National and 50 cents per member to the Illinois State, according to the decision of the two motions up to January 1st, after that date it will be necessary for him to send 50 cents to the Illinois State for new members that come in after January 1st, and \$1.00 to the National.

Then we understand that the dues at this meeting are \$1.50, just the same as last year, unless you are already a paid member in the National; then they will be \$1.00.

The Passing of State Laws.

Pres. York—Mr. Stone will now tell us of the troubles incident to the passing of State laws in the Illinois Legislature.

Mr. Stone—When we first applied to the Legislature for our State appropriation, there was no provision made for any Foul Brood Law, or anything of that kind. We simply asked for \$500.00 to publish the Report and pay the Association's expenses, and that was in 1891, when the Association was organized. We published two Reports, one in 1892, and one in 1893. The appropriation was first given in 1891, and we succeeded in getting that bill through, because J. M. Hambaugh was a member of the House of Representatives when our bee-keepers' association was organized, and he was also one of the charter members of the association. He, being a bee-keeper, could present the claims of the bee-keepers in such a way that he succeeded in getting a bill passed through the Legislature for the publishing of the bee-keepers' report.

Every appropriation bill provides for so much a year for two years, and then the appropriation bills all have to be asked for again. The next session of the Legislature, it failed to pass, yet the representatives and senators are all perfectly willing to give laws where they see that they are wanted by the people. But Mr. Hambaugh not being in the next session of the Legislature, it failed to pass, as I said before, because we didn't have representation enough. We kept offering it, session after session; we came every two years, and in 1905 we added to it the clause to exterminate foul brood, etc., throughout the State, and a \$1,000 appropriation. In this bill we asked that there be a penalty for selling apiarian implements, or appliances taken from a diseased apiary, or to sell, barter or give away any such apiary, appliance, queens, bees or honey from such apiary—and then began the fight. We received a letter from a bee-keeper nearby Chicago, stating that the word "honey" ought to be left out of the bill, and we consulted with the other members of the Executive Committee, and left the word "honey" out, at his suggestion—that was in 1905.

The bill as worded by us passed through the Senate in spite of the opposition of one bee-keeper who had writ-

ten a letter against it to the chairman of the Agricultural Committee, Senator Dunlap. But it failed in the House because we had not informed the members and the bee-keepers on the subject as we should have done.

The next year we asked for the same bill, and put one into the House and one into the Senate. We never had any more trouble getting our bills through the Senate after that, and we had not a better friend in the House than Speaker Shurtleff was. He had been a pupil of Dr. Miller in his boyhood days, and Dr. Miller had filled his ears full, and he was always favorable to our bill in the House, but it failed to go through when we got before the House committee; even the member who offered our bill, when the thing was being discussed, said, "The bee-keepers don't seem to be unanimous in this." I said, "Why"? He said, "We have a letter here from protesting parties." I said, "Is it signed by more than one man?"—(and I could always guess the man). He said, "No."

I find that, no matter what is asked for, the members of the Legislature are always for it if they think it is the right thing, and it is something that is needed and wanted by a large number. They are a set of very fair-minded men. All that they need is just to be informed as to what is wanted.

At our last meeting, the year before the last session of the Legislature, and the year before that, we resolved to send out petitions for the bee-keepers to sign, for that Foul Brood Bill, and I do not think we would have gotten it through if it had not been for the reports that came in. Those petitions were signed by over 500 bee-keepers, and when we presented them to the chairman of the Appropriations Committee—that began to make them look serious. He (Mr. Shanahan) would turn over one after another, but didn't say anything. And finally he said, "Yes, but how about that letter of protest?" It was the same letter all the time. In the letter were given the names of A. I. Root, C. P. Dadant, J. Q. Smith, as being interested in the manufacture of apiarian implements. The fact was, Mr. Smith did not manufacture apiarian implements at all. He was president of the Association, that is all. This last year that same letter was in again, and copies of it had

fallen into my hands. Our president had two; Mr. Dadant had one. But the committee could not resist the 500 signers to the petitions, from almost every district in the State. We proceeded to pick that letter to pieces, and we never heard anything more about it after that. Every member of the House and Senate we would approach, would know all about it, and would say, "I am going to vote for that." After the passage of the Foul Brood Bill, it came to the Governor, and he sent it to the Attorney General, and he picked it to pieces. He said there were three unconstitutional points in it.

As soon as I found that the bill was before him for consideration, I went to his office. He told me that the bill was unconstitutional—that you could not destroy a man's property and not compensate him. I said, "Well, then, you write a bill for us." He said, "I can't do it." I said, "How about the State Horticulturists—they have succeeded in securing a bill that when a man has San Jose scale in his orchard, they condemn his orchard and cut the trees down and burn them, and he can't claim damages at all." That put him to thinking along that line. I stood it as long as I could, and I telegraphed for Mr. Dadant, and he brought along with him Mr. Baxter, and I telephoned to our Treasurer. I had all of our Executive Committee there, and if I awakened in the night, it was heavy on my mind. I felt very much relieved after telegraphing Mr. Dadant, and got these men there. I felt that I was placing the burden on them, as well as upon myself.

We went before the Governor that day, and he had the Attorney General and his private secretary. The Attorney General read the laws to the Governor, and the defects in the bill were pointed out, and his private secretary had taken down all those things, and after the Governor had heard him, he said to the Attorney General: "Now, these men must have that bill. They have worked for it hard and long. You must write them a bill that you can get through."

There were only two weeks left then for it to get through the House and the Senate. Our Appropriation Bill was then in the Senate for \$2,500, and was being held up in the Senate (on the 3d reading), to await the decision

of the Governor on the other, because the Chairmen of both the Appropriation Committees in the two Houses were working together. They knew it had been in the hands of the Attorney General, and was being held there. Then, of course, that had to be amended, and new Bills offered for both the Appropriation and the State fund. The Governor said to the Attorney General: "You take these men in that room and draft just the Bill they want." The Attorney General found out by that time he could do it. We find, in comparing our Bill now with that of the Horticultural Bill, that, in the wording of the Bill for the extermination of foul brood, it is copied word for word on that of the horticulturists, but the word "bee-keeping" is used instead of "horticulture."

I will conclude by saying, as I did before, that we never will have any more trouble in getting a Bill for the bee-keepers, unless there is an entire change in the House of Representatives and Senate, and that won't be for a good many years—not in the lifetime of some of the men who are members. It is all in the knowing that enough people are interested, and want a Bill, and they will get it.

Pres. York—You have all heard Mr. Stone's report on our troubles in getting laws passed by the State Legislature. Are there any questions to be asked?

C. P. Dadant—Mr. Stone has given the "trouble" part of it; I want to give the "pleasurable" part of it. We worked for a good many years, Mr. Stone, especially. When we went before the Governor of Illinois, we brought to him evidence that 20 odd States had passed laws—Wisconsin, Michigan, Missouri, Indiana, etc. We showed him that in Europe, in Austria, in Switzerland, and even in New Zealand, laws were passed on the same subject. Then when we wrote to our friends of the different associations, we received a backing. This Association appointed a committee of twelve members. We got their unanimous support. I said, we must not leave a stone unturned. I went to the Eastern Illinois Association, and they passed resolutions in favor of the law.

I want to tell you that there is pleasure in this kind of work, when

you feel you have the entire world behind you. One exception confirms the rule.

Getting an Anti-Spraying Law.

Dr. Miller—What is the prospect of an anti-spraying law?"

Mr. Stone—I can answer that question very quickly. You can't get it through at all. I believe you were present, Mr. Dadant, when that Bill came before the Agricultural Committee. They heard what we had to say, and the Chairman of the committee, Senator Dunlap, was the same who had helped before. The Bill asked to prevent the spraying of fruit-trees while in bloom. Senator Dunlap said to the committee: "There is no use of that Bill, because no well-informed horticulturist will spray his fruit-trees while they are in bloom." And I find that is the case. Horticultural societies not only fail to advocate it, but don't approve at all of anyone spraying their trees while they are in bloom. I would not want to offer a Bill like that.

Dr. Miller—Mr Stone needs information; so does Senator Dunlap. Senator Dunlap wrote to me that very thing. I know better. Senator Dunlap is not a well-informed man, if he takes that view. I do know that my bees go to a large cherry orchard, where they spray when in bloom; the man that owns that orchard is a good man, in good standing, and one of the officers of the Northern Illinois Horticultural Society.

Mr. Stone—He certainly is not well-informed.

Dr. Miller—But you and Mr. Dunlap are not well-informed when you think there are no such men.

Pardon me for taking your time, but this is a law that is needed. These men are well-informed about other things, but they say, to "go through a large orchard, we must commence a little before the bloom has dropped, or we will not get in on time." When they get in that way, they poison my bees. They are poisoned every year that way, and I think the man who does the poisoning is a man above the average in intelligence, and certainly up to the average in honesty of purpose. I believe the man is sincere in thinking he can't get along without it.

Mr. Dadant—I remember the circumstance Mr. Stone speaks of. I

wish to say that a great deal of the trouble in not being able to secure an anti-spraying law is that we had practically nothing to show. We knew of some cases, but we didn't have as good a backing as we did when we went for a Foul Brood Law, and the action of other States and countries behind us. In the case of foul brood, we had samples of foul brood and showed them what it was. We had hundreds of bee-keepers taking an interest, writing to their representatives for the foul brood law. When we get to that point in this anti-spraying business we will have little or no trouble in securing the passage of a law. You may have the horticulturists to contend with. In the case of getting the foul brood law passed, our troubles was in having the State Legislature act on something they didn't know about, while in this case you have thousands of horticulturists, and they argue as the Doctor has just stated, that they would like to begin a little before the ending of the bloom or they will not get through their orchard. They start a little early so as to get through in time.

If we want to get action in this matter, we must get a great many cases for evidence where actual damage has been done to the bee-keepers. They say "You tell us a few instances, but you have no evidence." We have orchards in our neighborhood, and I have never suffered that I know of. When we find that we have suffered, and we can bring evidence to the legislature—say get a hundred instances where damage has been done—there will then be no trouble to show the horticulturists that they must change their methods. Horticulturists should not hurt bee-culture, and I don't think we will have any trouble in getting a law passed if it can be shown that it is needed.

Mr. Stone—There will be some exceptions, because there is a difference in the time of the bloom of the different kinds of apples, and I don't believe we can ever pass a law that will prevent men from spraying trees while in bloom who have large orchards of apples. We have the biggest orchard of anybody in our immediate neighborhood, and we have never had any difficulty about spraying. You can't convince a horticulturist that a law should be passed to prevent the spraying of trees when the trees are in bloom—

because there is not enough evenness in the blooming of the trees to allow such a law to be passed.

Dr. Miller—I would not like to have it go out to the world that prominent bee-keepers have stated here that there is no law that will compel a man to keep from doing a thing that is to be an injury to himself. Senator Dunlap takes the ground that no intelligent man will spray while the trees are in bloom, and now we are told that they must be sprayed, part of them, while they are in bloom. I don't believe in such a doctrine as that, and Mr. Stone is not going to cram it down my throat. They can be kept from it. If they need spraying part at one time and part at another, that is their business. I know there ought to be a possibility of passing a law that will keep a man from doing something that will injure him and bee-keepers at the same time. There is a law needed, because the horticulturists spray when it is doing harm to themselves and to the bees.

Mr. Huffman—I would like to ask one question along that line. We have a professor in Wisconsin who says you must spray when the trees are in full bloom. Our State Inspector of foul brood even went so far this year as to get pollen gathered by the bees while those trees were sprayed while in bloom, and showed the poison in that pollen that the bees had carried on their legs, and could not then convince him.

Dr. Miller and a lot of others say not to spray while the trees are in bloom as it has a tendency to kill the fruit and the bloom. If it will kill an insect why won't it kill the bloom of that flower? Undoubtedly it will. We thought we had it under way until this new man came in, but he has authority and what are you going to do? These professional men know more than men with experience.

Pres. York—I don't know that this convention can tell what to do with that official. I would say, educate him.

Mr. Stone—We would have to get rid of Mr. Dunlap as chairman of that Legislative Committee. He has an orchard of 1,600 acres, and his influence is world-wide.

Dr. Miller—I know that, but he does not know yet.

Pres. York—Some one said Speaker Shurtleff was a pupil of Dr. Miller's.

He might go down and teach Mr. Dunlap!

Dr. Miller—Mr. Shurtleff said he would do all he could on that spraying law. Senator Dunlap is the man that killed it, on the ground that there was nothing of the kind needed, because the horticulturists are so intelligent they would not do a thing that is against their interests! But I know there is need of a law.

Pres. York—We will adjourn until 1:30 p. m. I wish you would take the slips of paper with you and write on them, during the noon hour, such questions as you may wish to ask. Dr. Miller will not be with us tomorrow. His talk on foul brood will come this afternoon. If you have any questions you want him to answer, write them now.

Dr. Miller—All right; I brought the answers with me.

FIRST DAY—AFTERNOON SESSION.

At 1:30 p. m., Pres. York called the convention to order.

Mr. Huffman—I move that we have a Committee on Resolutions.

The motion was seconded, put and carried. The following were then appointed by the President: H. M. Arnd, L. C. Dadant, and Miss Weston.

Dr. Miller's Talk on Foul Brood.

Pres. York—Dr. Miller will have to leave before 4 o'clock, so I think we would better have his talk now. The topic is, "More About My Foul Brood Experience," or anything else that he may wish to talk on; but that is the assigned topic, I believe.

Dr. Miller—I really don't know that I have anything more to say about foul brood than I have already said. If you have any questions, I will be glad to answer them.

Mr. Huffman—This convention might like to hear you rehearse your experiences.

Pres. York—Tell us about your foul brood experience the past season.

Dr. Miller—In the past season there were one or two things that were a little different from what they had been before. One thing different was that if I found a few cells of European foul brood in a colony, I didn't feel sure it would be cleaned up by the bees themselves. I am not sure that it was in any case, but in previous years, if there were only a very few cells, the

bees cleaned it up themselves, generally. This year they didn't do so. Whether they would have done so if I waited longer, is a question. One difference, perhaps, was in the season; there was so little honey coming in, and that makes a difference about the bees' treatment of the case themselves. I did not have what I would call a bad case. I treated, I think, in nearly every case, by simply caging the queen for ten days; if she was a good queen, letting her free then, and if not a good queen, I would replace her with another queen. I think that I have learned this about European foul brood, which rather confirmed my experience of previous years, that European foul brood is a harder thing to get entirely rid of than American foul brood. The two are quite different. If you get rid of American foul brood, it is not, I think, nearly so likely to come back as the European; still, I am not in a position to judge very well about that, because of the disease being all about me, I can't tell which cases come from anything that has been previously in the hive, and which have come from the outside. I am handicapped in that respect. But, take it on the whole, I should say that in spite of the fact that when it first came into my neighborhood we were told that European foul brood was ten times as bad as the American—I think I would about two times rather have European than American.

I don't believe I have anything very particular to bring to you that will be news to you, but that is the whole thing in a nut shell.

Sec. Dadant—You used different methods in treating them? Which ones proved the most successful?

Dr. Miller—There is an important question as to the difference of treatment. With the American foul brood of course there is only one thing to do, and that is the McEvoy treatment—the brushing on foundation.

In the first place, the first year I treated, almost altogether by that treatment—brushing on foundation—and there were cases that returned, in the next year, perhaps almost as much as they have since when treated by the Alexander treatment, or the re-queening or caging. It comes back again after the foundation treatment. Another thing about the foundation treatment, it smashes things all to pieces so bad, that you might as well

kill a whole lot of your colonies. I think there were six colonies treated by the McEvoy treatment that deserted their hives altogether, so that was a dead loss. Then there are many that are so weak and so poorly that I would rather go on with the other treatment even if I knew it was coming back more or less. I know I am condemned for encouraging anything that careless bee-keepers might make bad work with, but when I know that I can save the combs, I ought to be willing to stand some discouragement and some trouble instead of destroying them entirely. I don't know how many hundred combs—do you know, Miss Wilson, about how many hundreds of combs we boiled up?

Miss Wilson—I don't know how many, but I know there were a great many.

Dr. Miller—If I had it to do over again, I don't think I would destroy a comb. Now, please remember I am talking about European foul brood, not American. That is entirely another story.

There are some other reasons, perhaps, why I would use that. As a rule, if a case is bad at all, your queen is hurt by it. I don't say that a queen has the foul brood; I don't think she has, and I don't believe she would feed it to another colony, but when she has been in a foul-broody hive, and fed by bees that have it, I believe her vigor is in some way impaired; we find the queen is loggy, as you call it—inactive.

A Member—I would like to know whether it is better or not, to re-queen.

Dr. Miller—That depends. If the queen is good and vigorous, I would not kill her; if she is not, I would. If the case is bad, it is better to kill her, because she probably will do poor work afterwards.

C. P. Dadant—If the colony is fairly good, and the queen seems to be healthy, your advice is to cage her for a certain length of time?

Dr. Miller—Yes, ten days, or even a shorter time. I don't know what time is best. I have caged some not more than a week, and they came out all right.

C. P. Dadant—What is your theory, in regard to the way this works?

Dr. Miller—Lacking positive knowledge, I have formed a theory that may or may not be correct, but so far seems

to work fairly well. We all know that when bees are starving they will eat their larvae. If anything happens to the larvae, such as being cut through with an uncapping knife, the bees will suck out the juices and throw out the skins. My theory is that when a larva dies from foul brood the bees will suck its juices the same as if it were killed in any other way, but that they will only do this while the juices are still fresh, and in their estimation fit for food. Very soon the dead larva becomes rotten, and the bees will not eat it. They will not give the babies rotten food. My point is that there is only a short time, perhaps only a day or two after the larvae dies from foul brood that it is sweet enough to be eaten, and during that day or two of time the bees suck up the diseased juices and feed them to the healthy larvae in other cells. After that time the larva is no longer fit to be eaten, and so the bees will not carry disease from it to healthy larvae. Now suppose you stop all brood-rearing in a hive, either by killing the queen or caging her. Say the queen stops laying June 1, and the same or another queen begins laying again a week later, June 8. The last larva will be sealed over June 9, or eight days after the egg was laid, June 1. If the queen begins laying June 8, there will be no fresh larvae to feed till three days later, June 11. But at that time there is nothing present from which they can be infected, for all larvae from the former laying were sealed two days previously, June 9. So the new lot of brood should remain free from infection. To be sure, a larva may die from the disease after it is sealed over, but for some reason I think such sealing will not be torn open until the time is past when the bees would suck the juices of the dead larva or pupa.

Dr. Miller—They will carry them out; you can see them carry them out. The front of the hive is sometimes spotted with those black specks, and if rain comes they swell up. You will see them lying there very plainly. I suppose they are all over the ground, and all around the apiary. They carry them out and drop them. So many times the question is asked, "How do you diagnose a case of European foul brood? What do you look for?"

The thing that we look for in our locality, if you will allow that term, is

the yellow brood; that is the distinguishing thing, and you will see it at a glance. In going over an apiary of 100 colonies, sometimes there is only a single cell there; you will ask, how can you look so close as to see it in a single cell? Supposing you had a thousand sheep here; you would not notice one from the rest; but if there is a black sheep among them, you would notice it without any trouble. Just so it is with the yellow larvae—they stick out and show so plainly that if there is a single yellow larva there you will see it. So it is a very easy thing for you to look through the hive and detect it.

A Member—Can you see it through the wax?

Dr. Miller—You don't have many sealed cells, but, by the way, I think there are more sealed cells than is generally supposed. I found there were more sealed cells with European foul brood than I had any idea of when I dug into it. You will recognize them very easily by that yellow brood, if you are looking for European foul brood. Mr. Dadant asked me how we would distinguish European foul brood from pickled brood. I asked him, "Is the pickled brood yellow?" And he said, "Yes." Then I don't know how you can distinguish them, and it is for him to look out for this, and tell us when he finds out.

Mr. Huffman—I would like to ask Dr. Miller if he thinks this germ is transmitted through the honey, from European foul brood?

Dr. Miller—I think the honey has very much less to do with the European than it has with the American. I think, in 99 cases out of 100, you may feed honey out of a European foul-broody colony, and it won't do a bit of harm.

Mr. Huffman—It is not contagious?

Dr. Miller—Not in that way.

Mr. Huffman—You think it is not so with the American?

Dr. Miller—It is very different from the American in that respect. Please understand this: The disease may be fed by the bacilli, which are simply little plants; or may be fed by the spores, which are the seeds. When you talk about the hive being disinfected, there may be spores all over the hive. They may be covered over the front of the entrance, but the bees are not going to pick those things up

and feed them to the babies; so I don't think there is any special danger from them. I know, especially in England, they will insist that the hive ought to be disinfected. Suppose I go to disinfecting my hives—I can't disinfect the ground. If the bees pick up the spore in the hive, or on the wall of the hive, and feed it to the larvae, why would they not pick it up a rod or two rods away from the hives? I would have to disinfect my whole field for rods and rods around.

Mr. Stone—That on the ground, is it not worthless?

Dr. Miller—Yes, it is worthless. I am talking of the dead, dried up stuff, not of the fresh.

Mr. Stone—It is not fresh while being carried out?

Dr. Miller—No, there is not much carried out until it is dry; that is the difference, remember, between the American and the European. The American dries down like glue, on the cell, and you can't get it away, but the European dries down in a scale, and they can break that loose and carry it out.

Mr. Stone—Then it is beyond the stage when they would have fed it to their brood?

Dr. Miller—Sure.

Mr. Stone—And therefore they would not gather it from the ground?

Dr. Miller—No; and yet there might be one case in a thousand where accidentally they would get a bit of that spore and get it amongst the food. You clean out your field of weeds and you think you have it all cleaned, and yet there may be some seeds scattered around, and the weeds would sprout up again, and so is it here.

Pres. York—Here is another question on this subject, Dr. Miller: "Is a beekeeper benefited directly or indirectly by foul-brood laws?"

Dr. Miller—If there had been a foul brood law when I first knew something about foul brood, in my vicinity, we would have had all the colonies looked after, and had them cleaned up, and I would not have had so much trouble with it. Let me tell you one of the reasons why I had as much trouble as I had, and that brings in the spraying business. When I first had foul brood—I think it was a year or two before I knew I had it the first time. The first I knew of it, I thought the brood was killed by the spraying, and I kept

letting it go on that ground. I knew the spraying was being done, and I knew the brood was being killed, and all that, and I supposed that was the trouble. Here is another benefit of the foul brood law: Suppose you have the disease all around you, you may clean up all you please in your own apiary, and if it is all about you, you can get it again; but if you have the right kind of a foul brood law, you can keep your apiary cleaned up and make your neighbor keep his clean. That is where the help would be in having the right kind of a law.

Dr. Peiro—Will you allow me to suggest something, not about foul brood? There is some trouble that I have had and I would like to know what it is. As Mr. York knows, I have kept bees for fifteen or twenty years, and I have never had any trouble with them before. I have always had a good honey harvest, but last spring something happened, and I don't know what the cause was. I had them all well packed with dry leaves in the fall, and they came out fine and strong. I took away the protection of leaves, along about the middle of April. I had some honey, and I wanted to feed them, and the first thing I knew the bees began to dwindle, and there were not as many as when I opened them up the first time. I thought it would right itself, and the first thing I knew there were hardly any bees there, but a great luscious crop of worms, and the bees were gone! The question in my mind is, What caused this? It was not foul brood, I am certain. There was no odor about it at all. The bees seemed to be bright and active, but there is a question whether I may not have encouraged robbing, and they got in there, maybe, and robbed the hives, and in that way my bees went down and the moths came in; but still I have treated my bees in the same way before, and I have never had any trouble.

Dr. Miller—How many colonies were affected that way?

Dr. Peiro—Two.

Dr. Miller—It might have been robbing. It is just possible that both of them were queenless.

Dr. Peiro—No, sir; they were not queenless. I saw the queens.

Mr. Stone—Did you see whether they had any stores left?

Dr. Peiro—Plenty.

C. P. Dadant—When did you see the stores in the hive?

Dr. Peiro—Quite late in the spring.

Mr. Dadant—When did you find them full of moths?

Dr. Peiro—The latter part of April.

Mr. Dadant—I won't explain that, then.

Mr. Kannenberg—The bees got disgusted; probably they had moths in the fall already.

Dr. Miller—There is just one rule you may get from this: Make up your mind that there will always be some things that you won't know about bees, and some things that you will not be able to explain.

Pres. York—Then you will have to ask Dr. Miller!

Single Tier or Double Tier Shipping-Case.

Pres. York—Which is better, a single tier or double-tier shipping-case? How many are in favor of the single-tier shipping-cases? (2) How many are in favor of the double-tier? (2) Why do you prefer the single-tier?

Dr. Miller—I would like very much to know which the dealers prefer. I asked that to know whether they, as dealers, find that there is a preference one way or the other.

Pres. York—Does it make any difference, Mr. Arnd?

Mr. Arnd—I think I would prefer the single-tier. If the double-tier happened to leak above, it would be apt to daub up the sections below.

Dr. Miller—But suppose you have between the two tiers the corrugated card-board—that won't allow any such condition to exist.

Mr. Burnett—We have had more double-tier cases this year than usual, owing to the fact that there was very little local honey produced here. We have had the Western honey, and this year there is quite a percentage in favor of the double-tier case. It is a package that the freight-handlers seem to handle better; that is the most essential thing. You take a single-tier case, the stevedores stoop down just about so far, and they let it drop, and the next goes on a little easier; but with the double-tier case they get pretty nearly down to the ground before they let go, and we have less trouble with the double-tier than with the single-tier. Since the introduction of the corrugated card-board we find the double-tier case is almost equal to the single-

tier as to leakage. The corrugated paper should be on the top as well as on the bottom. Lots of times the case gets turned upside down, and you can't tell which is the bottom and which is the top. If the card-board is on top, it makes very little difference which side of the case is up, the bottom or the top, and sometimes we think it is an advantage to have them reversed. A narrower glass may be used on the double-tier case; there is glass enough to show up well when set on an ordinary counter for sale; it shows up better, and it is liked better for that reason. It seems to take up less space on the counter than a single-tier, and that is something to be considered. I don't know but there are other reasons.

Pres. York—Is there any difference in the price of honey in a double or a single tier?

Mr. Burnett—Not if the quality of the honey is the same, only people will take the double-tier in preference.

Mr. Huffman—Is it not a fact that the freight rate is less on the double-tier than on the single? I understand it to be quite a little less on the double-tier.

Dr. Miller—The single-tier case is a more expensive affair than the double-tier. And that counts always. It costs less for a 24-section double-tier case than 24-section single-tier.

Mr. Stone—I would rather have the opinion of one Mr. Burnett than of a dozen of men that just ship their own honey, therefore I am going to change my vote from single-tier to double-tier.

Dr. Miller—Mr. Burnett has given one reason I never knew before, and I can very easily believe it. With a double-tier case, you don't have to reach so far down as with a single, and in letting it down you come closer to the floor; but take a single-tier, and the freight handlers will often let it down with a drop. When you put down a double-tier case you get down so far and let go, and with a single-tier you have to get down that much farther, and instead of getting down, you let go of it, and it goes itself.

C. P. Dadant—I was in Denver, and had a talk with Mr. Rauchfuss, manager of the Colorado Honey-Producers' Association. Out there they produce honey much more in car-lots than we do, and he shrugged his shoulders at the idea of anybody doubting that the double-tier case was the better. One

of the points he made is the fact that some people have no idea that the combs in the case are brittle, and if a man steps on the case it will cause the combs to crack. I could see that Mr. Rauchfuss was positive on the matter of the double-tier case being superior. We in the East have not tried the double-tier cases to any great extent. Most of the cases sold in the East are single. Mr. Burnett says that on account of a great deal of honey coming from the West, and but little in this neighborhood, they handled more of the double-tier this year. I believe the tendency is going to be for the double-tier.

Dr. Miller—Mr. Dadant is speaking of the present; if you go back some years, I think you will find the double-tier cases were used in plenty, more plentiful than the single-tier. For years I used the double-tier. I think I shipped a good many double-tier to Mr. Burnett, when he was not as white as he is now.

Pres. York—He is a "white man," anyhow!

Dr. Miller—I have handled a great many single-tier and double-tier cases. You will find this difference: Take a 24-section case and lift it, and you have a feeling that it is not solid; the double-tier case is solid; it is a stronger case than the single-tier.

Width of Glass in Shipping-Cases.

Pres. York—How many prefer 3-inch glass in shipping-cases? Raise your hands. (4.) How many prefer 2-inch glass in shipping-cases? (None at all.) Is there any reason you wish to give for preferring the 3-inch?

Dr. Miller—These questions are of quite a little importance, if, as seems to be the case now, there is a tendency towards settling upon a standard shipping-case. There has been something said about that lately, that we ought to settle down upon a standard shipping-case, and all use the same kind. If that is true, then it is important to know what is the best for a standard shipping-case, the single-tier or the double-tier; how many sections in a case, and then that question comes in, which shall we have, the wide glass or the narrow glass? I supposed for a great many years that every one believed that the wider glass is better for looks, and that the narrower glass makes a stronger case. If we are work-

ing for strength, the less glass we have the better. If we are working for looks, then the more glass the better, so long as we expose only the best surface. Take the edge of a section, the top and the bottom, those unfinished, unfilled cells, we want them covered up and when we have done that, the more glass we have the better. I suppose we all agree upon that; but lately I see those that say the narrower glass looks better. I don't understand it myself. To me the wide glass looks better. Mr. Burnett, which do you think looks the better?

Mr. Burnett—The wide glass looks the better. A great many people don't buy more than one case of honey at a time, and set it on the counter for sale. If it is the double-tier, it takes up less space, and gets the honey up where it can be seen, and it is out of the way, and the narrower glass then answers better than it would on a single case, where it is difficult to see it. I think it was yesterday that Mr. Baldrige and I measured some of the glasses in the warehouse, and we found very few that had more than a 2-inch exposure of glass. The grooves seemed to be deeper in some cases than others. A 2-inch exposure is, in my judgment, quite sufficient; that would have to be 2½ or 3-inch glass, according to the depth of the groove. It is not necessary, as a rule, to mention how extracted honey is put up; in buying it in quantities they expect it to be in cans. We did get a couple of barrels in from Wisconsin, but it almost brought us back to the time "before the flood period," to think about it. You seldom see it now. By the way, too, that double-tier case was more generally used in Wisconsin twenty years ago than any other case; in the East I think they use the single-tier cases more.

Dr. Miller—There is a point there Mr. Burnett touched upon only incidentally, in comparing the double-tier with the single-tier. Suppose you have the same width of glass in both the double-tier and the single-tier; you have a narrow strip in the middle of the single-tier, so when it is piled up, there is a larger proportion of exposed surface shown in the double-tier case than in the single-tier case.

Mr. Burnett—My neighbor behind me says with the double-tier there is danger of drip from the upper tier. Well,

the paper and card-board have obviated that now. Of course, if it were very badly broken it would seep down through, but so it does in the single-tier cases. With the Western honeys, in a drier climate, if the comb gets broken out of the frame, it is not as liable to leak as it is in Illinois, Wisconsin or in the Mississippi Valley territory, where the honey seems to be thinner and has a tendency to leak out more, that is, if the comb gets broken. That is a point, of course, we have to consider, whether it is enough of an argument against it, is a question, but in my judgment it is not. I know that in this territory the honey is not so thick as it is from Colorado and Utah, in the comb.

Mr. Stone—There is one advantage in the narrow glass, even in double-tier cases. It shows less of the space between the honey and the upright parts of the section. The more you narrow that down, the less of that you show in proportion to the surface.

I want to speak of the shipping-case that was displayed at our State Fair this year at Springfield. It was a double-tier shipping case, and inside of the glass was a paper with circles cut out that would just show the center of the single sections; it seems to me that would be a nice way to show our honey. The circle was, I should judge, about 2 inches in diameter, that just showed the center of the sections; they showed no wood at all.

Mr. Burnett—We have had some of them; it is objectionable.

Dr. Miller—Does not show enough?

Mr. Burnett—It is kind of a peep-hole. People don't like it; they think where you show it on the square it is better; but speaking of 2-inch glass, that means but a 1½-inch exposure. That would not do at all.

Oldest Bee-Keeper.

Dr. Miller—Who is the oldest bee-keeper present, that is, who has kept bees the longest?

Mr. Stone—I think Dr. Miller is.

Pres. York—How many years, Dr. Miller?

Dr. Miller—I began in 1861.

Mr. Steubing—I was eight years old when I commenced the first time. I am seventy-three years now.

Pres. York—Sixty-five years!

Dr. Miller—Where was that?

Mr. Steubing—In Europe. When I

came over here I bought bees four weeks afterwards, from Mr. Wheeler.

Mr. Arnd—How long has Mr. Baldridge kept bees?

Mr. Baldridge—I don't know when I did commence. I have used the Langstroth hive since 1858, and I kept bees prior to that. What year I commenced, I don't know.

Pres. York—Is there any one here who wishes to claim he has been longer in the business?

Dr. Miller—When I commenced keeping bees, Mr. Baldridge was one of the men I looked up to as one of the leaders on bee-keeping then; I didn't know anything about it.

Pres. York—That would make you pretty near 100 years old, Mr. Baldridge!

Mr. Baldridge—I was seventy-three last Saturday.

Heat Produced by Drones.

"Is the heat produced by drones worth taking into consideration in allowing them to be reared?"

C. P. Dadant—I asked that question, and would like to have it answered. Here is the point: In Europe there are many bee-keepers who have different ideas than we have in this country, and there has been discussion as to the advisability of preventing the excessive rearing of drones.

Is it advisable to do away with the largest amount of drone-comb and replace it with worker-comb, or should we take it as a fact that bees rear drones and that drones are useful—that they keep the brood warm, at swarming time, especially? I have taken the side that the drones are usually too numerous, and that it costs more to rear them than it is worth, and when they do produce heat it is at a time when there is very little needed.

Dr. Miller—The question would be, How much more heat will a pound of drones produce than a pound of workers?

C. P. Dadant—No, not exactly. I object. They say, and they are right in saying, that where we prevent the bees from rearing a pound of drones they may not rear a pound of workers. The queen, as you know, at times seeks for drone-cells. If there are no drone-cells, will she lay worker-eggs? Therefore the question as put by the Doctor is not quite what it should be.

Dr. Miller—It is so nearly so that it is hardly worth while to consider the difference. What is the space in the hive that may be occupied either with drone-comb or with worker-comb? If it is occupied with drone-comb, drones will be raised there; if occupied by worker-comb, there will be workers there. The amount of heat produced certainly would be very little more with the drones than with workers, and you have those workers to help to make more, and the drones are just hindering your getting so many more heat-producers. I have seen the arguments, and from men apparently of good sense, that hold to the view that drones are heat-producers and are worth while, but I can't really make up my mind that the amount of heat from drones reared is enough more to pay for the difference; and then, as Mr. Dadant suggested, the time when we need heat, there are no drones there. If the bees rear drones to gain heat, why don't they rear them in the spring, when they want them, and not in the summer time, when it is so hot that the bees have to stay out to get cool? Then is the time when they rear the drones. It is a good deal like the darkey said about the moon. "The moon is ever so much better than the sun; the moon shines at night, when it is dark, and the sun shines in the day time, when it is light." You get your drones when you don't want the heat.

Miss Wilson—If you want to prevent swarming, destroy the drone-brood, and that will help a great deal to prevent swarming.

Mr. Huffman—We as bee-keepers, as I understand it, consider the drone a consumer and not a producer. Won't they consume more than enough honey to offset the heat they produce? If we can get workers, we have just what we want, even if we don't get so many.

Mr. Stone—I have always looked at it just as Dr. Miller said—in the spring of the year, when they need heat in the hives the most, there are no drones, and you will always find when the bees are hanging around outside on account of the heat in the hives, that is the time of the year when the drones are very abundant and not needed, and that is the time I put out my trap and destroy them.

Dr. Miller—I think it would be worth while to answer Mr. Dadant. What is

the view amongst American bee-keepers here? Do you think there is enough advantage gained from the heat produced by drones to make it worth while to rear drones for that purpose?

Mr. Dadant—To allow the natural quantity to be reared?

Dr. Miller—Does the heat that they produce, pay? If you let the bees alone they will rear more drones than they will if you try to suppress them. Will those extra drones, if the bees are left to themselves, pay their keep by the extra heat they produce, that would not be produced if you didn't have them?

Mr. Dadant—Will it pay for us to remove as much as possible the drone-comb and replace it with worker-comb, and avoid it as much as possible in such hives as we do not care to breed from, and encourage it in colonies we do care to breed from; or should we consider that the drones are needed, and that it is a mistake to change the purpose of the colony, and go against nature?

The most practical way, I think, is to replace the drone-comb with worker-comb. I think that drone-traps are injurious; they are annoying to the bees. The most practical way is to remove as much as possible of the drone-comb and replace it with worker. Is it advisable to allow nature to follow its course in rearing drones, or should we suppress them?

Pres. York—How many think it is better to let nature take its own course? None. How many think you had better interfere? (20.)

Mr. Steubing—Put some new comb in there, and you will not have too many drones. I think it is a good thing to destroy the old drone-comb and put new foundation in.

Ready Sale of Honey.

"What kinds of honey find the readiest sale in and about Chicago?"

Mr. France—Clover, basswood, etc.

Dr. Miller—Alfalfa.

Mr. Burnett—White clover, I think, has quite a percentage over every other.

Dr. Miller—What next?

Mr. Burnett—Basswood.

Pres. York—Ahead of alfalfa?

Mr. Burnett—Yes.

C. P. Dadant—Pure basswood, unmixed?

Mr. Burnett—There is a call for basswood honey. I don't know about

that. You are talking now about what is the preponderance of inquiry.

Pres. York—A question close by that is, "What variety of honey comes the nearest to being the pure sweet, without any flavor? What honey has the mildest flavor?"

Dr. Miller—I asked that question, and for this reason: There are some, and there ought to be more, who use honey in sweetening their food or their drinks. I believe it is a healthy thing to do. For my own taste, honey of a strong flavor won't do for that; it wants to come the nearest to having no flavor. What is the mildest flavor?

Mr. Stone—Alfalfa.

Mr. Burnett—The one answering that, alfalfa, does he produce alfalfa honey?

Mr. Stone—By proxy.

Mr. Burnett—So long as you know it is alfalfa. Of course I could answer the question, but as a fact it is only hearsay or representation with me. I can tell where the honeys come from that have the least honey characteristic about them, as they tell me. I know where those honeys come from, but what they are produced from I don't know, only as it is represented to me to be from sweet clover; sometimes alfalfa, but even sweet clover and alfalfa differ very much in appearance and in taste. It depends upon what part of the United States it was produced in—the locality, and even in localities not very far apart; the taste varies, so it is very difficult to answer that question, yes or no.

Mr. Stone—Do you know that will be the case unless you mix it?

Mr. Burnett—It is only represented to me, I don't know from personal experience. They tell me that honeys produced in the Salt River Valley and in other valleys not far from there are very different, and yet produced from alfalfa.

Mr. Huffman—I would like to ask Mr. Burnett if it is not the soil where it is raised that has to do with it?

Mr. Burnett—I think, perhaps, it is, but it is only a "think". I don't know.

Mr. Stone—I got my first authority on alfalfa honey from a man who lived in the state of Utah, and he had the honey and said it was the only honey that was produced there in any quantity. I was showing him some of the honey that I had when he was at the Fair. I asked him if he could tell

what kind it was. He sampled my alfalfa honey and said, "That is good alfalfa", and it was pure enough white so that I got the blue ribbon on the candied alfalfa honey, and the judge claimed to know alfalfa honey when he tasted it. I think Mr. York knows the taste of alfalfa honey.

Dr. Miller—This is important; we have to spend a little time on it. If you want honey without any flavor at all, the nearest you can to having a sweet without any flavor, why not take sugar?

Pres. York—It would not be honey.

Mr. Stone—Sugar is often adulterated.

Dr. Miller—Why not take sugar in place of honey? Why do I want the honey at all? Because I know that nine out of ten persons hurt themselves by using more sugar than they ought to. Eighty pounds to every man, woman and child in the United States is consumed annually, and you hurt yourselves by consuming too much sugar. If you have honey you don't hurt yourselves. It is wholesome to use the honey. I want it for a sweet because of this wholesomeness and I use it in my coffee in place of sugar. Let me come down to putting it more concretely: For several years, and I am almost ashamed to say it because

I am a producer of clover honey. I have bought alfalfa honey to drink. I have bought that that had very little flavor in the drink, and it tasted very little different from using sugar. Last year Mr. York told me that there was a special brand of honey that was the best alfalfa honey he had ever tasted and I got some of it and I could not use it—it was so disagreeable in the drink. He took it for flavor. He liked the alfalfa flavor. From his standpoint he was right, but from my standpoint I didn't want it. This year I got some and some of my folks, Miss Wilson here, says "That is a very inferior article, nothing like as good as you had last year." I say it is a great deal better, not so much of the alfalfa flavor but what I can drink that.

You can have a different flavor in the same kind of honey and a different color. And it is of some consequence to know what is the mild honey that can be produced for drink.

Mr. Burnett—Your answer to that would be "locality", Dr. Miller.

Dr. Miller—The climate makes a

difference—the colder the country the lighter color it is; elevation makes a difference; soil makes a difference.

ELECTION OF OFFICERS.

The election of omcers was then held and resulted as follows: President, George W. York, of Chicago; Vice President, Jacob Huffman, of Monroe, Wis.; Secretary Treasurer, Louis C. Dadant, of Hamilton, Ill.

ELECTION OF A DELEGATE TO THE NATIONAL MEETING.

Mr. Stone—We have to elect delegates to the National Association under the new constitution. This is the last meeting the Chicago Northwestern will have before delegates are sent to the National.

Pres. York—This question as to whether or not there will be a meeting of the National next year cannot be known at this meeting, there might be some objection to electing a delegate with the understanding that he could serve after the first of January. This association has the right to elect a delegate any time they wish, and to instruct him to serve at certain times. I would rule that way. If you wish to elect a delegate I see no harm in it.

Mr. Huffman—I think your remarks, Mr. President, are all proper in regard to the time. Of course, if we convene usually about this time of the year next December, we would have until the following February for the annual meeting. But, of course, as Mr. Stone says, you can elect now if you see fit. But it is a little far in advance I would think.

Pres. York—I am not authorized to announce there will be no meeting of the National in 1912, but I thought the time would be too short to get enough delegates to hold a convention in February, 1912, so there was some talk about having the next National convention a year from next February.

C. P. Dadant—What is to hinder us from electing a delegate in case there should be a meeting, which delegate will not serve if there is no meeting, and we can very well elect another if necessary, and then, in case there should be a meeting this Association will be represented.

Pres. York—It is "up to" the convention, if you wish, you can elect a

delegate and instruct him in case the meeting is held to represent this Association.

Mr. Stone—The directors will all be new and they can direct the meeting just as well for the year coming as they could if a lot of delegates instructed them. The delegates are only supposed to go and elect officers to the National, and at the same time direct them. The directors can, I am sure, do all right without them. The point I wish to bring forward is: What is the use of a delegate at the meeting when there are no directors to be elected? The directors that are elected to go into office the first of January will hold for the year. There are no new directors to be elected, and that being the duties of the delegate, the delegate would have no office to perform in that line so a delegate would not be needed.

Pres. York—Of course there are other interests to pass upon besides the election of officers, there might some important questions come up. They could not elect officers again next year, of course, but there might be some very important questions that would come up at the meeting that you ought to have delegates there to represent you, besides the election of officers. It might be well to select some one as delegate. I want to do what you want to do. I simply said what I did for information. If you wish a delegate now is the time while the question is up, to elect one.

Mr. France—In order to shorten matters, I suggest that the Secretary of this Association be considered as a delegate to represent this convention in case it is needed, Mr. Louis C. Dadant.

Pres. York—Mr. France suggests that the Secretary of this Association act as a delegate in case one is needed.

Mr. Kannenberg—I move that we elect Mr. Louis C. Dadant as our representative to the National, to represent this Association in 1912.

The motion was seconded, put and carried.

Honey Receptacles.

"Would brass or copper do for a honey receptacle?"

C. P. Dadant—If it were tinned copper it would be all right; if brass or copper, I don't believe it would do.

Mr. Huffman—Would copper do alone?

Mr. Dadant—I believe it would do, for a short time, but not for very long time.

“What effect, if any, does galvanized metal have upon honey?”

Pres. York—How many think it does have any effect on the honey? (One.)

How many don't know? (All hands raised.)

Mr. Stone—Why should it? Is not the galvanizing on iron, tin?

Mr. Dadant—It is zinc.

Mr. Huffman—I would like to hear from Mr. France, he is the only one who raised his hand.

Mr. France—I find with a new galvanized iron tank, after the honey has been in it for quite a time, it is discolored considerably. There is a chemical action there. In having the honey in a galvanized-iron tank for a short time, I can't see that there is any particle of change, but at the same time there must be some change the longer the tank is used the more discolored the inside of that tank will be.

Mr. Dadant—In those matters, I think we should go very slowly, because we don't know. The chemists can tell us a great many things we are not informed about. To give you an illustration of the danger of some things we don't know about: When I built my home, I put in tanks in the attic. Everybody who had any experience said, “Use lead”; I used lead. A young fellow from France, who had no experience in things practical, but who had read books, said: “Lead is dangerous.” We went into the attic together and picked up some white matter from the side of the tank. He said: “That will poison your water.” Nobody knew anything about that. He said there was enough mineral in the water of the well to act upon that lead and make it poisonous. I say in these matters we ought to be very careful in deciding for or against a thing. In this particular matter under discussion, I believe we ought to stick to tin, or tinned copper.

Mr. Stone—We are all led to believe that tin is all right. If the honey discolors the galvanized iron, it will discolor the tin, too, until you wash it off; and still we say honey won't corrode tin. It turns it black, but just as soon as you put water in it it will wash off. But something has taken place,

some chemical action. I want to know if there is anything we can put honey in that will not turn.

Mr. Dadant—I believe this black of which Mr. Stone complains is formed only at the cut edge. I have had honey in tin for three years, without taking it out, and when it came out, the tin was just as bright. Two weeks of sugar syrup in a tin can will do it more damage than honey in it for two years.

Mr. Stone—Sugar syrup has all kinds of acid in it. That is the reason Dr. Miller complains about sugar; there is so much acid in it, it is poisonous.

Dr. Miller—It is because sugar must be changed from cane-sugar into grape-sugar. I didn't give expression to this, and I don't like to now, but I have a very definite remembrance of hearing some one whom I considered good authority at the time, say that it was unsafe to put honey in galvanized iron except for a very short time. I would consider it dangerous, and yet I can't quote the authority.

Pres. York—Are not the honey-extractors made of galvanized metal?

Dr. Miller—Yes, very common, and it is considered all right to use them, but not for an extended period of time; for tanks, that is all right.

Mr. France—These galvanized storage tanks—those who have used them will remember that they are well soldered at all seams. The discoloring comes of the honey in contact with the iron. Unfortunately some of the honey-extractors have been sent out with black iron faucet; it will turn the honey as black as ink.

European Foul Brood.

“When and where was European Foul Brood discovered?”

Dr. Miller—The first we heard much said about it in this country was in New York State, in the western part of the State.

Pres. York—What year was that?

Dr. Miller—I can't say.

Pres. York—I think it was about 1900. Between 1895 and 1900, I should say. I remember getting a letter from Capt. Hetherington, and he wrote that unless the bee-keepers were very careful, black brood would wipe out the whole bee-keeping industry. Capt. Hetherington died a few years ago. He was one of the largest bee-keepers in the State of New York.

Pres. York—Mr. H. M. Arnd is to talk on "What I Find to be the Best Drawing Card in Selling Honey to the Chicago Retail Trade."

Mr. Arnd—That is a pretty hard question. I have not written any paper. I don't know what is meant by "drawing card," whether it is to the private family or to the grocery trade. I suppose from that they mean the grocery trade.

The best drawing card in the grocery trade is attractive signs, occasional exhibition of bees, and giving samples of honey. I think that one of the greatest drawing cards you have in the city here is on Saturdays, when the streets are crowded, especially in some of the stores that are in the outskirts, on some prominent corner, to have an exhibition hive and at the same time give every one that comes along a little taste of the honey. Of course, in order to sell much honey to the retail trade, you have to educate the people first as to the value of honey. A dodger telling of the honey is good, and when you give them a sample of honey, this is very often an advertisement.

Mr. York, for a number of years, had his honey demonstrated at the Fair department store. I think he spent many dollars having a woman that did nothing else. She would give every one that passed a little cracker with some honey on it, and of course, if the honey is very good, they will come again and want to buy. I don't know of any better drawing card than to get the public to have confidence in your goods. Make them believe, and make them know, that your goods are the best they can get.

Nothing will sell honey for you more than one person telling another person about your honey. You can talk to a person as much as you want, "blow your own horn," as the saying is, but when a friend comes to a friend and says, "If you want good honey, you get it from Mr. York, or from Mr. Burnett, or from Mr. Arnd, whoever it is. To get such a recommendation from some one who is not interested in your work, that is what counts. I don't know that there is anything else I can say on this subject. It is a broad subject, but is open for discussion.

Pres. York—What methods have you found to be the most successful?

Mr. Arnd—The most successful way

I have found is to get an old customer and keep after him. I tell you, to work for a retail trade in a city like Chicago, you must get good, fancy prices; and in order to do it, you must keep everlastingly at it.

Mr. York—Mr. Bull has had some experience outside of Chicago in the retail trade; we would like to hear from him.

Mr. Bull—Selling to groceries?

Pres. York—You might tell us of your house-to-house experience.

Mr. Bull—I sell from house to house. The way I sell mostly is to take a sample can of honey and give away samples, and, while doing this, talk to the people to whom I give them. A sample can is a drawing card for me. I take a ten-pound can and call for a spoon, and dip it into the sample. I show them the largest size can, and get an order for that if I can. If I cannot, I sell them a smaller one. Say nothing about the smaller, until you see if you can sell the larger. I sell one pound of comb honey to twenty of extracted.

Pres. York—What prices do you retail at?

Mr. Bull—Ten pounds, \$1.60; five pounds, 90 cents; two pounds, 40 cents. The five-pound pail sells the most readily. I sell a number of ten-pound pails; two-pounds don't sell very fast because I don't push them. I use all tin—friction-top, tin cans; the five and ten-pound pails have the wire handle.

Mr. Huffman—Do you label your cans?

Mr. Bull—Yes. I will show you the label right here (exhibits it). I put these on five and ten-pound cans; on the two, it is a little too high, so I trim it off.

Pres. York—Mr. Bull has a very fancy label. It does not go all the way around the can.

Mr. Arnd—That will go very nicely in the country where people allow you to come into the house, but it would not do in the city of Chicago. At the places where they can afford to buy honey, you will see the butler or the servant girl; and the butler, sometimes you will think, owns the house, from the way he acts; you can't touch him with a ten-foot pole!

Mr. Bull—You don't have to go to that class of people to sell honey. It is the working man, the man who

works for wages, he is the man that buys the honey, every time.

Mr. Dadant—The great question is, the difference between comb and extracted. Extracted honey is the honey for the masses. We have made a specialty of extracted honey for many years. We found that, where we sell in quantities, the average working man cannot afford to pay the prices required for comb honey; \$1.60 is a very good price for ten pounds of extracted honey, but a small price for comb honey. That is why you can reach the masses with extracted honey when you cannot with comb honey. I must acknowledge that I have learned something today, and I thought I knew quite a good deal about selling honey. I have never tried to give away samples. That thought never occurred to me. I believe from the suggestions given, and the facts in the case, that it would be a good thing. A great many people let their imagination run away with their reason, and take honey for sugar just by looking at it, saying, "honey cannot be that pretty—that is sugar." If you give it to them to taste, that ought to have some effect, although some people would rather believe their imagination than their palate.

Sec. Dadant—How much honey, Mr. Bull, have you sold from house to house, on your best day, in taking orders?

Mr. Bull—The biggest day I had, in orders, was 287 pounds. In the last two months I have sold about 4,500 pounds; from 85 to 90 percent was delivered; sometimes almost 100 percent. I sometimes delivered as much as I had orders for, and I would sometimes run short.

Mr. Arnd—Have your wagon with you?

Mr. Bull—I take the orders and deliver in an automobile.

Mr. Huffman—Do you take back second-hand pails, or do you always use new ones?

Mr. Bull—I do sometimes; if they offer to give me them, I take them, but never pay them. Very few pails do I get back.

Mr. York—I think that is a splendid record. Perhaps very few here have duplicated it.

Mr. Dadant—The best part of the record is the price gotten for the honey. When you get 16 cents, that

is 4 cents more than the ruling price. A bee-keeper who has a large quantity of honey to sell can certainly get good results from that. I believe that ought to be published and the bee-keepers advised.

Mr. Bull—When you all do that, we won't be able to buy honey at 10 cents a pound.

Pres. York—I am sure Mr. Bull deserves to be congratulated on his success, and I hope it will be kept up. I believe it can be done in a locality such as he sells in—a locality made up of men who are earning wages. They are the people who use the honey, and not the people in a city, who send the butler to the door, and you have to run by a servant in order to get into the house.

Mr. Bull—I don't miss a sale often when I can talk to the lady of the house.

Mr. Arnd—In Chicago, in a locality where the working people are, it is entirely different. Mr. Bull is in a place where they say, "Here is the honey-man. Here the honey-man comes!" and they know him. You start that business in Chicago; take the millions of working people—they don't know anything about you. You cannot get an audience; they think it is some fake.

Pres. York—Do the people know you down there, Mr. Bull?

Mr. Bull—I can go in a strange locality, where I have not been nor seen the people before, and can sell practically as much as I can where I am known.

Mr. Arnd—The people in Chicago are suspicious.

Mr. Bull—That is where your sample comes in good; open the can and let them taste it.

Pres. York—Do you collect on delivery, Mr. Bull?

Mr. Bull—Yes.

Pres. York—Do you think you could do as well in Chicago as where you have been working? I wish you would try it.

Mr. Stone—I think that will work everywhere; it works in Springfield.

Pres. York—That is only a suburb of Chicago, you know!

Mr. Stone—Sometimes I take in some fruit, some apples, and just put in some five-pound cans of honey, friction-top cans. I sell all my honey that way, and I don't sell any honey but

what I have orders for, and I have a good many of these ladies whom I would meet maybe at a particular grocery store, and they would say to me, "Why don't you get around to our house the same as you do at some other house?" And I would say that it is "because when I come there I don't see anybody but your servant-girls, and I cannot sell to them. You ladies don't like to be seen at the back door, and my chances are very scarce for seeing you, and that is the reason the farmers don't come to your house to sell their fruits or honey."

I never did give samples, because they will question your honey when it comes, if they have had the sample of your honey; but you take it with those little friction-top cans, and tell them to sample the honey, and when they have tried it they almost always want a pailful. I sell all the honey I can produce, and buy a good deal to supply my customers, and I don't advertise. I leave cards. I have an order card, with my address on; all they have to say is, how much honey they want, and put a postage stamp on the card and mail it. I sell all my honey that way.

Pres. York—Does Mr. Bull use an order card?

Mr. Bull—I gave out some fifty or sixty cards once, and got one back!

Mr. Stone—Maybe you had a postage stamp on them. I tried that once and never got any back!

Mr. Bull—My idea is that, to get new customers, you must go direct to them.

Mr. Stone—These cards are principally given to the old customers.

Mr. Bull—They will come back. Once in a while you get an order from a neighbor who is recommended to you.

Mr. York—Mr. Baldridge, I think it is a good time for you to come in on this.

Mr. Baldridge—I expected I would be called on. I very seldom talk on this subject except with my customers; but I should dislike exceedingly to sell honey for 16 cents a pound.

Mr. Didant—Too cheap, or too high?

Mr. Baldridge—I pay an agent 12 cents a pound for selling it.

Mr. Dadant—How many tons can he sell?

Mr. Baldridge—I don't know. I have an agent selling honey now, and give him 12 cents a pound.

Mr. Dadant—Where is he? Is he here?

Mr. Baldridge—Oh, no, he is at work!

A Member—You give him the honey, don't you?

Mr. Baldridge—He pays me 12 cents a pound for it.

Mr. Dadant—That makes you even—if you pay him 12 cents and he pays you 12 cents! (Laughter.)

Mr. Baldridge—I sell all my honey in five-pound lots to consumers, away from home. If they come to the house they can get less, but no consumer can get less than five pounds away from home, and I sell no more than ten pounds to any one under any circumstances. No consumer can get twenty-five or fifty pounds of honey from me. I keep my customers hungry. I call on my customers only once in a year. And when the year comes round, and I come round, they are hungry for my goods. I intend to sell them honey that they will buy again, at 24 cents a pound. That has been my price for six years, and I have not changed it; ten pounds, \$2.40; five pounds, \$1.20, net. The pail does not go with the honey.

Mr. Dadant—Do they empty the pail while you are waiting?

Mr. Baldridge—No, sir; I take orders in advance. Nobody gets honey from me without ordering a week or ten days in advance. People don't want the pails as a rule, and I make a difference of 10 cents for the empty pail; \$1.30 with the pail, and \$1.20 without pail. I do that with a five-pound pail, and they think they are getting a bonanza when they are getting 10 cents for the pail. (Laughter.)

Mr. Bull—I would like to ask Mr. Baldridge how much honey he sells in the course of a year?

Mr. Baldridge—I could not answer that question, but I work only three hours a day. (Laughter.)

Mr. Bull—How long do you wait while they are emptying the pail?

Mr. Baldridge—If I deliver in the forenoon, I get it in the afternoon.

A Member—You make two trips for one delivery?

Mr. Baldridge—Yes, sir, and I get acquainted by so doing. (Laughter.) Let me add this: When I take orders for honey, I have three samples—one of liquid honey. I call the honey that I sell "liquid honey," not extracted. I

have one sample of candied honey, granulated. I have one sample of comb honey, and I give all my patrons their choice; five pounds of honey of any of those three kinds, at the same price, and my average is about ninety pounds of extracted in 100.

Mr. Dadant—Liquid honey?

Mr. Baldridge—Liquid honey. Hardly anybody wants comb honey when they can get a good article of extracted honey at the same price. The bee-keepers have made a grand mistake in making a difference in the price. You might as well brand your honey "adulterated" when you sell extracted honey for less than comb honey.

Mr. Dadant—It is the cost of the article that rules the price, and that is why extracted sells for less, but I want to say, that in Europe there is very little comb honey sold. In Europe the people were in the habit of pressing their honey and selling strained honey, and today the sale of extracted honey in Europe is very much greater than the comb. And I believe the average customer in Europe would, as Mr. Baldridge states, prefer extracted to comb honey, because they are accustomed to it. I think we can educate them, but I protest against this thing of saying that our honey is adulterated because we sell it cheaper. We can produce it for less. I find, in this country, that there are many people who much prefer comb honey to extracted honey.

Mr. Stone—My experience is that people who have used extracted, and who have used comb honey, will eventually get to using nothing but extracted. I have customers who say to me, "I want the blue ribbon case of comb honey." One of my customers is State Secretary Rose, one is Auditor McCullough. They said to me, "We want the best comb honey you have; we can't use the extracted," but after two or three years they have begun to use the extracted. Mr. Rose says, "I believe we are going to turn away from the comb and turn our attention to the extracted honey; we believe it is the better."

Mr. Bull—The most of these people that want comb honey, if you come around with the extracted, they say, "We don't want that." But that is mostly a bluff. You offer them comb honey, and they don't want any; that is the size of it, with me.

Mr. Dadant—I move that when we adjourn we adjourn until 9:30 tomorrow morning.

The motion was seconded, put and carried.

Pres. York—The Secretary has a paper, written by Mr. J. J. Wilder, which I will ask him to read, on "What I Think of the Caucasian Bee."

What I Think of the Caucasian Bee.

Mr. Dadant addressed me as an enthusiast in regard to the Caucasian bee. Now I am not as enthusiastic over the Caucasian bees as I am in dead earnest when it comes to advocating them to my fellow bee-keepers as the best bee for commercial use known to the bee-keeping world.

If I were at Cordele, Ga., I would attempt to write but a few lines on this subject, but turn over to your Secretary a number of reports I have on file that have come in from leading northern bee-keepers relative to this bee, and let him read them in your hearing. They are worthy of great consideration. But since my arrival at Bradentown, Fla., where I expect to spend the winter, a fresh report has reached me relative to this bee, from a noted northern bee-keeper, and I submit it for your hearing and consideration:

Lansing, Mich., Nov. 14, 1911.

Dear Mr. Wilder:—I am writing you at this time, for I read your articles in the American Bee Journal, and I see by it that you had never received a report as to the wintering qualities, etc., of the Caucasian bees, from the far North.

I have had the Caucasians for a number of years, and I am very well pleased with them, even if there are some faults to find with them. But when I sum up their bad qualities, and then try to balance them with the good, I find them away ahead of the other races of bees, and I have tried about all there are to try, even paying Mr. D. A. Jones \$15.00, away back in the early eighties, for a pure Holy Land queen, and had to kill her the second year in order to save myself and family from death by stinging, for they were not to be quelled with chloroform.

Well, to get at the subject I am writing you about, that is, the wintering, etc., of the Caucasians, I will say they are the most hardy bee in existence today. They will stand almost any kind of usage, and I can winter them in my cellar—almost a mere handful of bees, when the other races will worry and desert their hives.

Here in the North there are some who winter their bees out-of-doors, but at times think it almost impossible to do it.

I can get a third more money in my locality with them than I can with the Italians. I have both, and run about even as to the number of colonies. I

breed my Caucasian queens at my home yard, and have them mated in an isolated place.

I have only the gray variety; I have had the yellow, but think them inferior to the gray. I have my breeders imported from the Caucasus mountains, and have tried some queens from the far East, bordering on the Caspian Sea, but they are too badly mixed up with the yellow variety.

As you say, they are good propolizers, but if the entrances are made dark, and not too large, that will lessen their propensity for daubing up things with their dark brown glue, which resembles them so much in color.

Yes, Mr. Wilder, the queen-business is almost a fake when we cannot get a good, fair margin for our queens, and then ship to some one who would find fault if he were going to be hung, and who wants a dollar for 50 cents.

I would not furnish anything but a good queen, and would expect her value; and, because I cannot obtain it, have retired from commercial queen-rearing for the present, at least.

If the business bee-keeper would learn to rear his own queens, from the best stock obtainable, he would then know the great value of good queens, and there would be something doing in queen-rearing and honey-production, and that in the near future, too.

A. D. D. WOOD.

From the great number of reports relative to the Caucasian bees for commercial use, the "missing link" seems to be, "Will they stand wintering in a cold climate?"

From the great number of Caucasian queens that have been sent to the North for the last two seasons, this link will be supplied, and if the claim be well connected at this point (and I believe it will, for the Caucasians are by far the hardiest bees when it comes to the extreme test), this variety of bees will be adopted by the business bee-keeper. Then bee-keeping will take a rise, such as it never has taken, and there will be a general revolution of bee-keeping everywhere. This is what I think of the Caucasian bees abroad or from reports.

Now what do I think of the Caucasian bee from my own experience with it?

Relative to its good and bad qualities, as compared with that of other races, I will say that its good qualities far outnumber those of any other race known to the writer. Caucasian queens reproduce themselves more often; the race repels other races with greater force. A colony will re-queen itself more often. Less weaklings or dwindling among them. Colonies will keep themselves nearer in uniform

strength. Their queens live longer and have a more active life; better honey-gatherers, and give the honey a better body. Compact brood-nest, much easier to handle at all times; less inclined to rob; will fill in closer around the brood-nest with honey at the close of the season. Less inclined to swarm. Much easier to control swarming among them, that is, they yield readily and easier to the treatment. Better pollen-gatherers. More hardy. Spread out better, and go farther in nectar-gathering. They fill out their comb better with honey. Less queens are lost in mating. Not as easily discouraged, and never furious under ordinary handling.

Their good qualities count mightily to us business bee-keepers, and are certainly worthy of our consideration if we are looking for a better bee.

Now about their bad qualities. They build more burr-comb, but not any more brace-comb than the Italians do. But you have to keep them with plenty of nectar to gather or they will "roll" in the glue.

The building of burr-comb and the gathering of propolis at times when there is no honey or nectar in the field, are the only two objections that I have ever been able to dig up against them, and I don't think justly any other objection could be brought up against them. I have been breeding these objections out of these bees some, and I am troubled but very little with gluing now. They deposit it about the entrance or across the bottom of the frames next to the entrance, which can easily be removed with a hive-tool.

I now have eight apiaries of these bees, and I have been using them extensively for five or six years, and am just delighted with them. I never made any money at bee-keeping until I adopted them, and since then I have made money at honey-production and I am able to spread out apiaries over the country, and manage about three times as many bees as I otherwise could.

Truly, the Caucasians have revolutionized bee-keeping with me, as well as with others, and I can't say enough in their favor.

Give them an honest trial and you will never have reason to regret it.

I introduced about twelve queens the first season I obtained them, which

was late in the fall, and before the spring flow was over I was convinced.

J. J. WILDER.

Pres. York—How many have had experience with Caucasian bees? (2.)

Mr. Stanley—I would endorse all that has been said, though they don't bring as much for queen-breeders as the golden Italian.

Sec. Dadant—We got Caucasian queens from Colorado. We never have been able to get any definite results from them. I heard from Mr. Wilder; he says he used the first cross between Caucasian and Italian. He prefers the Caucasian queen mated to pure Italian drone. Every queen we got from Colorado we reared several queens from. They built a lot of burr-comb around their brood, but they seemed to have the workers and get the honey. We have been unable to test them thoroughly, to see whether twelve Caucasian queens would produce more than a dozen Italian queens, but it looks good.

A National Honey Trade-Mark.

"In advertising honey, should the National Bee-Keepers' Association advertise a trade-mark for its members?"

Pres. York—We are going to have a delegate to the National next year; do you want him to try to have a trade-mark adopted for its members?

Mr. Dadant—Let us hear from Mr. France.

Mr. France—That is a little hard to answer. If all the honey of all the Association members was of one quality, then I would say, go ahead and have a trade-mark, but I tried to help our Association members sell honey through the Information Bureau, and I find there is a great difference in honey, and if we had a trade-mark, what would we call it? Every man's honey, I believe, should sell on the merit of the producer who stands behind it, and every time he sells honey it should be of such quality that he is ready to stand behind it. I question the advisability of a National campaign on that point.

Mr. Dadant—Are not some of the members, some of the bee-keepers, advertising themselves as members of the National, and using the trade-mark?

Mr. France—Three or four years ago I came down to Chicago with the idea of this very point in mind, and got what was called "seal labels"—to fit

over the top of a Mason fruit jar, guaranteeing that the contents were good so long as the seal was not broken. The intent was good, but, not very long after, complaints began to come in; the same seller did not deliver the same kind of goods twice to the same customer, and in the same vicinity—even in Mr. Bull's territory, complaints came in that honey sold under a seal label was of a different flavor and a different article. The question came back to me, What is your label good for?

Mr. Dadant—We must take into consideration that tastes differ; what tastes good to one man does not taste good to another. Perhaps some of you have read a remark made by Dr. Miller, in which he intimates that he at one time thought honey-dew should be considered as good honey, but that he was young then! He puts it in that way, so he evidently has changed his mind on the question of honey-dew, and I think a great many of us have ideas upon honey that others do not entertain. For this reason, as Mr. France has said, honey should be sold on its merits. But the fact of a bee-keeper being a member of the National, I think ought to go very far with people.

Mr. Stone said when he sold honey, he took apples, and other fruits for sale, with his honey. There is a difference between selling honey in the country and selling it in Chicago.

Mr. Bull—I have had many ask me, Are you from Chicago?

Mr. Stone—I tried several hundred of those labels that Mr. France speaks of, and I could not make any use of them. I have them lying in a table drawer in my home now. I find it is just as he says, every one has to stand behind his honey. Mr. Becker sells more honey in the Springfield market than any other man around there, because he puts his honey in little jars, and sells a great deal of it in 10-cent jars. He takes all he can carry whenever he goes to town. He sells thousands of pounds of honey that way, besides what he has of his own. Sell a good article, and stand behind it, and you will always increase your sales.

Mr. Dadant—Regarding the recommendation of the National in the use of the label, and that not being used by Mr. Stone and Mr. Becker, I don't think that ought to stand in the way of other bee-keepers. Mr. Stone and Mr.

Becker are both members of the State Association, and are known to be, and both are, exhibitors at the State Fair at Springfield, and they generally get the blue ribbon or the red ribbon—they can't both of them get the blue. That goes quite a long way towards getting customers, but when a man has no such recommendation as they have, then I think the fact of belonging to a National Association is a very practical and good thing, because the National will investigate the matter if there is any complaint made, and it is a good thing for a bee-keeper in the selling of his honey.

Mr. Bull—I don't think there is very much in that. I have never seen anything in it.

Mr. Huffman—I would like to ask if Mr. Stone and Mr. Becker are the only two that exhibit their honey at the Springfield Fair?

Mr. Dadant—There are three or four.

Mr. Huffman—I was going to say that, if a third man came in, may be he would carry away the blue ribbons!

Mr. Stone—There are usually four.

Bee-Keepers Buying Honey to Retail.

"How about the honey-producer who is a member of the National Association, and buys honey from others to retail?"

Pres. York—How about his using the trademark on honey he didn't produce himself, if the National adopted a trademark?

Mr. Huffman—I had a South Dakota man tell me this fall that he didn't begin to produce all the honey he sells, but he stands back of the honey he gets. He gets what he buys through a Western association, and they put a label on it and stand back of it, and if it doesn't come up to what they guarantee, they agree to stand good for it.

Pres. York—Is it advisable for a bee-keeper to buy honey from other bee-keepers to supply his trade in case he runs out? How about that?

Mr. Bull—Most certainly; always.

Mr. Stone—Right along that line, I think that the National did one of the best things for members of the Bee-Keepers' Association, in advertising who wanted to buy honey and who had honey to sell. I have known of Mr. Becker going to that very list; when he got on the track of a man he now goes to every year to get his honey—a man somewhere in Michigan. He

goes there to get white clover comb honey. I thought that was as good a step as the National ever took, and even if the new Constitution is adopted they can't do anything better than that; but I do hope that they will do wonderful things.

Heavy Mortality in Bees.

"Has any one noticed a heavy mortality in bees so far this fall?"

Sec. Dadant—What I mean by a heavy mortality is: There were more dead bees at the hive-entrances this fall than usual. All the way from a pint to two quarts of bees. Something I had not seen before. I have noticed, in opening the hives, the bees were dead right on the honey. I have never seen it before, myself. My father says he has.

Mr. Stanley—I find quite a few small colonies have died, excepting in the heartease district, where they fared better.

Sec. Dadant—Was that from starvation?

Mr. Stanley—Both; some with very little honey.

C. P. Dadant—I had a talk with Dr. Miller about that matter this noon. This is a rather strange occurrence, because they have died in larger numbers than they usually do in the fall. We had very severe changes of weather in November. We had, on one Saturday afternoon, a temperature of 76 above zero, and the next morning it got down to 20, and by the next evening it was down to 10. Dr. Miller's experience was from 77 to 15, and then to 8 the next day, but the Doctor took his bees in right after that, and he didn't notice the mortality. The difference in his case was 5 degrees less, although he is very far north of us. The cold wave seems to have come round and struck harder in our neighborhood. I ascribe the loss to that. When the cold night came, a number of them didn't get back to the cluster. I have never seen such a terrible mortality, but I must acknowledge that I have never seen such a sudden change in temperature as a drop of 66 degrees in 12 or 14 hours.

I read in a Chicago paper on Sunday, or Monday, that one man was overcome by heat in the afternoon of Saturday, and that two drunken men were found frozen to death during the night of Sunday. I believe those are

facts. This is almost equal to the story of a Texas man, who told us he was plowing with a yoke of oxen on a very hot afternoon, and one of the oxen was overcome with the heat, and while he was unhitching the oxen, the other was frozen to death! (Laughter.)

Pres. York—I don't think Mr. Dadant and Mr. Stone will hear anything worse than that tonight when they go out to see Chicago.

When is Honey a Luxury?

"At what price does honey become a luxury?

Mr. Arnd—At the present price of butter, I would say 50 cents.

Pres. York—At present you can buy two pounds of honey for what you give for one pound of butter.

Mr. Arnd—And one pound of honey would go farther than a pound of butter.

Mr. Stone—A great many of the honey buyers—honey consumers we might say—at our fair had been in the habit of buying honey every fall, but we did not sell nearly as much at the Fair this fall as usual. Last year there was no fruit, and people must have something, so they took to honey, this year we had so much fruit that honey was a luxury, and I think the question would have to be decided by the supply and demand of fruit. I believe that honey is a luxury this fall, with fruit as plentiful as it was, but as the winter comes on and the season changes, they have to begin to use the apples out of cold storage, then I think that honey would cease to be a luxury any more than apples.

Pres. York—A little while ago Mr. Dadant said that the price of honey depends upon its cost; I don't think Mr. Baldridge would agree with that because if it didn't cost 5 cents a pound for extracted, Mr. Baldridge would ask 24 cents just the same.

Mr. Baldridge—I have not made a difference in price for years. I would not advance the price to 40 or 50 cents. I sold a great deal of honey at 32 cents during the Civil War—5 lbs., \$1.60. I am now down to \$1.20 and have been for years. I call that **down**, and as I ask the same price for extracted honey as I do for comb honey, it gives my patrons confidence in the quality of the honey. Nearly 9 out of 10 consumers, if not 19 out of 20, and perhaps 99 of

every hundred, think that extracted honey ought to be worth as much, if not a little more, than comb honey if it is pure. That is my experience, and I have had a little in the handling of honey since 1861, when I came to Illinois. I have been handling honey every year since, and when I fix the price it is that price all the year round, and I treat everybody alike, white or black, rich or poor, and my main trade is with the middle class you might say, the working classes, they are the ones that eat the honey. They are not saving their money to carry with them to the next life.

Mr. Dadant—The price of honey during the Civil War is no criterion. I had very good occasion to know that, I happened to come to America from Europe during the Civil War, and what little money we brought with us we got 65 per cent premium for in depreciated green-backs. Gold was worth \$1.65—so when honey was selling at a higher price during the Civil War, it was selling cheaper than it is today. They were paying for it in depreciated money.

Mr. Stone—I want to say one thing in support of Mr. Baldridge's statement. If we would charge only ten cents a pound for our honey, people would get to thinking after a while that that was too high a price. I had something happen right along this line in Springfield. I was selling honey in glass jars at 15, 20 and 25 cents a jar, to a grocer in Springfield. I was supplying the principal grocer there who has the biggest trade of any, and his customers seemed to get so they didn't demand the honey. And Mr. Connelly's buyer made an effort to get some comb honey to sell to take the place of that, and he kept the comb honey until it granulated, it didn't sell well and his buyer who had been buying honey from me asked me about it, as to how he could liquefy it and put it into jars so that they could make something out of it. I advised him how to do it and they went to the trouble of melting that honey, but found that it cost them about a cent per pound more than they would have paid me for the honey, so they had all that trouble for nothing.

I get 15 cents a pound for my honey in five-pound cans. I was in a barber shop one day waiting for my turn, when a man came in with a five-pound pail of honey. Some one asked him

how much he had paid for that honey; he said \$1.00. It was some of Dadant's honey, which had been shipped into Springfield. One of my customers asked me, "Did you change your price?" I told him no, but motioned for him to say nothing about the price. Those men in the barber shop thought the price of \$1.00 was all right, and if I had not been in the habit of selling for less, my customers would have probably been willing to pay me the same. Mr. Baldridge sells his honey for more money and his customers are satisfied with it. I could probably sell as much honey of I were to ask \$1.00 a can for it.

Mr. Bull—You will never get a good price for honey until you ask it. Last year I sold honey at 14 cents—this year 17 cents, and to the same parties. They give me an order for honey before I tell them that the price has raised; they say, "Bring it anyway."

Wording For Honey-Label.

"What is the best wording to put on a label on a can of honey to melt the same when candied?"

Pres. York—Directions for reliquefying, I suppose is meant by the question.

Mr. Stone—On the top of every one of our friction-top jars we put a label, telling how to liquefy honey, by setting it in water and heating it until it is liquefied; not allowed to get too hot.

Pres. York—Is it necessary to set it in water? I think that is out of date—too much trouble and bother.

Mr. Stone—It is more apt to scorch and discolor it if you don't put it in water. I always put it in water.

Mr. Dadant—Is not putting it in water the handiest way for the average housekeeper?

Pres. York—My wife never does that at all. She sets it on the back of the stove or oven for a while, and it is soon melted.

Mr. Bull—Would the average wife be able to do that without spoiling the honey?

Pres. York—We can set a can of honey on our furnace in the basement for a few days, and it will soon be re-liquefied. Set it on a steam radiator and you will have heat enough.

Mr. Arnd—Most people in Chicago set it on radiators.

Mr. Bull—You should have a label to suit everybody.

Mr. Huffman—I don't think it makes any difference how you heat it, so long as you don't overheat it. We melt it on the radiator, or put it in a warming oven of the stove, and in a day it will get just as liquid as when it is extracted.

Mr. Dadant—At what temperature is it?

Mr. Huffman—160 or 170. Just so that you don't boil it.

Mr. Stone—Will candied honey liquefy in the heat of the sun?

Mr. Dadant—Yes.

Mr. Stone—Does the sun ever get hot enough to liquefy candied honey?

Mr. Bull—I think so. A tin can gets so hot you can't put your hand on it.

Mr. Stone—It won't do it in glass; I have had honey in glass jars, standing in a south window of my own house all summer, and it didn't liquefy.

Mr. Arnd—I have jars of honey in a window, and in the summer time it liquefies during the day, but when the night comes on, it gets back a little.

Mr. Stone—I didn't think honey would liquefy in the sun, nor on a common radiator. Our heat is hot water heat, and I don't know how long it would take it to liquefy on top of a radiator. I doubt if it would in any reasonable time. It is safer to put the honey in water, but it must not be gotten over a certain heat.

Pres. York—Should the label give the temperature?

Sec. Dadant—I think it is Mr. Aikin's label that says to put it in water, but don't let the water boil.

Mr. Bull—I have a label on which is written:

"All pure honey will granulate in cold weather. The contents of this pail, when candied, can be brought back to its fluid state by placing the pail in hot water (not boiling water) on the stove until the honey becomes liquid. Care should be taken not to overheat or burn honey."

Mr. Stone—That is very much like mine.

Pres. York—Is it true that all pure honey will granulate in cold weather?

Mr. Bull—In the Northern states.

A Member—I have had a jar of honey that would not granulate in any kind of weather; I had it for several years.

Change in Color of Honey.

"Will re-melting honey cause a change in color if the temperature is not too high, but if it is left standing

quite a long time at a certain temperature?"

Mr. Bull—No, sir.

Sec. Dadant—I have never tested that matter myself, but, from an authority that is not to be disputed, I can say that they liquefy their honey and can tell the difference in honey that is left in the tank over night, and the honey that is drawn out, as soon as it liquefies. There is a shade difference if left in the tank over night; it gets darker than if drawn off in jars. That is true; there is no doubt about it.

Mr. Arnd—I have had that experience myself—leaving it in the tank over night, the honey became much darker.

Mr. Bull—What was the highest temperature?

Mr. Arnd—The honey was never overheated; we drew off part of the tank the night before; it was not overheated.

Mr. Bull—130, 160 degrees, or what?

Mr. Arnd—Just to guess at it, about 150.

Sec. Dadant—Both would show dark if it was overheated.

Mr. Arnd—There is one thing certain, if you take honey and heat it up to a certain temperature, and take off the heat, it will not get any hotter.

Pres. York—No, but the fact of a large tank of honey standing over night—

Mr. Arnd—That proves that constant heat darkens the honey.

Mr. Stone—People use fireless cookers. They heat their meat to a certain temperature; they don't begin to cook it down, but put it in the fireless cooker, and it gets sufficiently cooked.

Mr. Dadant—It doesn't get any hotter.

Mr. Stone—It just retains that heat, and it cooks through.

C. P. Dadant—There is one question here that has not been settled—What is the degree that is safe? Beyond what degree of heat dare we not go, that is, granting that we draw the honey off right away? It seems to me that men who handle a great deal of honey ought to be able to tell us, and I hope that next time we meet we can have a true answer to this question. Beyond what degree will it be unsafe? At what degree are we safe?

Mr. Arnd—There is one man here in this audience who has not said a word

today, and I think he knows as much about this as any one—Mr. Woodman.

Mr. Woodman—We find different kinds of honey; some will stand more heat than others, Michigan raspberry, heated to 160, will spoil, while clover and basswood, and some others, will stand that amount of heat. I should say that 140 to 150 degrees would be about the highest temperature you can safely heat honey.

Mr. Arnd—How many bee-keepers here use a thermometer in heating honey? (Two.)

Mr. Arnd—I use my own judgment; I don't use a thermometer, and never did, and I never overheat my honey. Some honey will liquefy at 120 degrees.

Pres. York—It takes longer at a lower temperature, of course.

Mr. Arnd—I run mine from 22 to 24 hours.

Proof of Pure Honey.

"How can a seller of honey prove to a doubtful customer that it is pure honey, he is selling?"

Pres. York—One honey-dealer here in the city says that you may publish him as a swindler if you find it is not pure honey that he sells.

Mr. Arnd—When I first went into the honey business I had a booklet, and I offered a reward of \$200.00 to any one who would find I was selling impure honey, and that question used to come up as to how they were going to prove it. I said that they could take it to a chemist who knows how to analyze honey, and if he says my honey is impure I will give you \$200.00, and I will pay for the analysis; but if you take it to a chemist and he says it is all right, you will have to pay for the analysis. I had some tested by one man, and he sent me a letter from the Board of Health's chemist, stating that the honey had been analyzed and found to be perfectly pure.

Mr. Dadant—I think in this matter there is nothing like being sure of your product. If you guarantee it in every way, if you know that it is pure, you are pretty sure of selling your goods.

There was a discussion in the French bee-papers in regard to comb foundation, and one man stated that whenever comb foundation is transparent it is not pure beeswax, but adulterated. I wrote an article in which I offered to send to him, or to any other person

who read the paper, samples of comb foundation that was transparent. They could find out for themselves if it was adulterated, and he never sent for the samples. But I had seven other requests for samples, and sent them.

Testing Beeswax for Purity.

How can we test beeswax to know that it is pure?

Mr. Dadant—I am not a chemist, but we have three ways of testing beeswax, one is specific gravity. Beeswax will float in water because it is lighter than water. Fill a vial with water, put into it beeswax that you know to be pure, then pour into the bottle enough alcohol to cause the wax to sink. You have made your water lighter than the wax. You are then ready to test samples of adulterated material of a lighter gravity. It is a good test for paraffin. You must however be sure that no air bubbles help to hold your sample at the top. The shape of the foundation cells will retain air and help it to float. A good way is to chew both the pure wax and the tested sample. You then have both in the same gravity condition.

A second test is saponification. Beeswax will change to soap when boiled with lye. Mineral waxes are unchanged.

Another test is the melting point. Beeswax melts between 143 and 147. Other waxes melt at different temperatures, and the most dangerous are those that melt, like ordinary paraffin, at low temperatures, say from 118 to 132.

The smell when burning is also a good test. Drop beeswax on the stove. You will readily detect the sweet scent of it. It was on account of that sweet scent that they used pure beeswax in the churches in the old days.

Of course the chemists have many other ways and when there is great doubt, it is well to send to a chemist. The Department of Agriculture has offered to make tests, although a sample that I sent them some two years ago has never been reported on.

I have caught several swindlers myself, when I had sufficient proof to accuse them. We had one instance, a Mr. Candy, formerly of Chicago, who was traveling through the country offering beeswax. He came to Keokuk and offered his wax to people who

handle beeswax and always send it over to us. He sold them 200 pounds and offered more and they were ready to take more. They found he had telegraphed to Chicago about it so they were doubtful. They telephoned to me that they had the beeswax and brought it over to me and as soon as I saw it I said "That is not beeswax." There was a look about it that made me think it was not. We are on the lookout for such things. They had the fellow arrested and he owned up to it. He paid all damages and \$10.00 to me for going to Keokuk. He was willing to do whatever we asked in order to get out of it.

Mr. Stone—Is there anything in the test of chewing it until it crumbles?

Mr. Dadant—I never have been able to make a very good success of it with paraffin.

Mr. Dittmer—I don't think I can add anything to what Mr. Dadant has said. I think he has made a very comprehensive statement of the matter, and, in fact, much better than I could. I think Mr. Dadant will agree with me that we who handle so much wax usually can tell by the looks of it.

Mr. Dadant—Yes, but at the same time you must make sure.

Mr. Dittmer—I think that any wax that is adulterated to any degree will arouse our suspicions at once. We can tell beeswax by feeling of it in the dark or smelling it, but Mr. Stone was asking about chewing—I think by the chewing of beeswax you can readily tell if there is anything foreign in it. I think if it has paraffin it will be brittle in the mouth while beeswax will be more like chewing gum. I think that Mr. Dadant has explained the matter fully.

Mr. Dadant—The worst adulteration we have to contend with—the most common—is from the little fellow who thinks he can put a little grease in his beeswax. That is very easily detected because there is a sticky touch to the beeswax, and I was told long ago by the dealers who handle beeswax that they tested it by scratching the wax with the nail, if it made ripples it was pure, if it went smoothly it was adulterated. Usually if you break it and smell it you can smell the grease in it.

We have found other ways where people cheated on beeswax. One time we found nine pounds of iron in the

bottom of the kettle. My father remembered having seen a string in a cake—the iron was tied with a string, the man had evidently held it up in that cake of beeswax until it would congeal, so that the iron would not go to the bottom.

I want to tell you that you must never boil your beeswax with hard water. You will get a sediment which you think is dirt, but it is beeswax. Melt your beeswax with plenty of water, never overheat it. Soft water is preferable for this reason: Hard water often contains iron and that iron will darken the wax. Those are little points that are of use to bee-keepers if they will keep them in mind.

Mr. Arnd—Is not beeswax, after being melted once, a good deal better than after being melted several times?

Mr. Dadant—No.

A Member—Would you not rather have yellow beeswax than pure white?

Mr. Dadant—I would rather have beeswax as near to the bees as I could get it. The more of the honey smell that you leave in your beeswax the better it is. The wax cappings should be washed first. We can save that honey and make vinegar out of it. Don't heat the wax too hot; don't melt it over and over again. It is better to have a little sediment on the bottom than to melt it over. And please don't use acids; you thus take the sweet bee-smell out of your beeswax; use good clean cistern water, and plenty of it, to melt your wax; keep it as near to the original condition as you can. Wax melted in a solar extractor is all right if there is no honey in it.

Mr. Huffman—I would like to ask Mr. Dadant if wax made from sugar syrup is considered good beeswax?

Mr. Dadant—What do you mean? Comb made by the bees from sugar syrup? There is not enough of that to make it worth mentioning. I would call it pure beeswax.

Mr. Huffman—I had about a half pound made from sugar syrup, and it was a question in my mind whether it was pure beeswax.

Mr. Arnd—Will beeswax absorb water? A man here in Chicago, a very extensive bee-keeper, but not now in business, sent me a big cake of wax one day, and I noticed the dripping of water from it. I had paid him for two or three pounds of water.

Mr. Dadant—I want to warn bee-keepers about that. You must be careful and not overheat your beeswax; the grain of it then becomes broken, and like a sponge. It is very difficult to change the color after it has been colored. The worst beeswax is beeswax that is burned. You destroy it as wax. The residue of that burned beeswax will no longer be beeswax.

Mr. Huffman—Does it damage it in some way by boiling the wax too much?

Mr. Dadant—Certainly; but you can't burn it if you have plenty of water. Melting it in iron kettles, and with hard water, are the worst points in melting beeswax.

Black Substance at Bottom of Wax Cakes.

"In extracting wax in a solar extractor, what is the black substance that settles at the bottom?"

Sec. Dadant—Propolis.

Mr. Dadant—I am afraid I am speaking too long, but that is a subject on which we have had lots of practice. There are two or three things that cause a dark sediment. When the wax is good, the amount of sediment is very light. Of course the dark part will go to the bottom. There may be a little foreign matter; you all know that the cappings of cells contain different materials. The fact is that the bees use not very pure beeswax in their cappings.

Mr. Stone—I asked the question. I could not account for that dark color; it was in the beeswax, and it came from the purest kind of white clover honey cappings. I saved them all to have an extra fine sample of beeswax for the Fair. I took the beeswax in and showed the black substance in the bottom of it to my wife, and she could not believe that was in the white cappings that were on the white clover honey. It astonished me, and I would like to know what it was.

Mr. Dadant—We are running away from the adulteration of beeswax, and that is another subject. This melting in a solar extractor you will find advisable when you have a small amount of wax. If you have cappings, nice white cappings, melt them with water, and you will have as nice a product as you can possibly have. As far as the extractor is concerned, the best one is

the Hersher. In the German wax-press you have a great body of beeswax, the melted combs that you put into that press, and you have to keep it hot in order that it will run; you press it, and some of the wax will be in the center of it. It is exactly the same if you make a big pressing of grapes or apples. You get the most juice from the apples by using the press with layers of cloth—get more and more quickly the juice out of apples than by pressing in one big lump; and the same way it is with grapes; you have to give it time to run—twenty-four to forty-eight hours afterwards you will still be getting juices; don't press in a hurry. If you put your beeswax in layers, as Hersher has it, separated by cloth, and press it, you have a very thin amount of residue. You will get more beeswax that way than in any other. The only fault I have to find with the Hersher press is that the layers are horizontal instead of vertical. The beeswax tries to rise to the top of the water. Some people put salt in the water to make it heavier. I think the Hersher is the best machine.

However, you can take an ordinary wash-boiler and melt your wax in it. I can make you a wax-extractor for \$2.00, but you don't get wax like you would by using the Hersher press. It will take 97 per cent of the wax out of the comb.

Sec. Dadant—I don't think the Hersher press is needed for cappings. It is for old combs—something you have to squeeze to get the last bit out; but not for cappings.

The convention then adjourned until 9:30 a. m., Thursday, December 7, 1911.

SECOND MORNING SESSION.

Pres. York called the meeting to order.

The first thing called for on the program was the report of the Auditing Committee as follows:

"We, the undersigned, members of the Auditing Committee, have examined the accounts of the Treasurer and find them well kept and correct.

JAMES A. STONE,
JACOB HUFFMAN,
GUS DITTMER,
Auditing Committee."

On motion the report was approved.
Pres. York—We have a paper from

Mr. D. J. Blocher, Pearl City, Illinois, which the Secretary will read. It is entitled:

Should Honey Producers Try To Rear Queens?

In all other avocations in life, so in beekeeping, as one part is built up another must be neglected or must suffer in a degree at least. To rear queens and at the same time not decrease the supply of surplus honey or retard its progress is hard I confess. Queens are simply a part of the cash proceeds of an apiary usually attained by the amount of honey produced. Such being the case it is evident that queen rearing will lessen the surplus honey of any breeder. There are reasons that in my judgment are logical. One reason is that all commercial queen rearing is a forced condition, or, we should say, an abnormal condition which largely retards good work.

Another reason is the disturbed condition that bees are in continually. A man may satisfy himself to some extent on queen-rearing and producing honey at the same time by setting aside a certain number of colonies for honey alone, and the same number from which to rear queens and produce honey at the same time. All should be of equal strength as nearly as possible. And queen-rearing should begin just as early in the spring as possible, and be kept up till late in the fall. At the end of the season balance accounts. This should be repeated for a number of years to average up the good and poor years. Then strike a balance and see whether a honey-producer should rear his own queens or rear queens for the public with the expectation of having as much honey, or its value, figuring all discouraging features and losses connected with queen-rearing.

Some may wonder why I, a breeder, should talk thus and still continue the business. A fair question. I have often been tempted to quit and devote all my time and energies to the production of honey alone. But when one is engaged in a business awhile it is hard to quit.

The way I started into the queen-rearing business was because we have only one good honey year in four here, and I expected queen-rearing to bring up the average a little better. And all I have to say now, after much effort, loss of honey, etc., is that queen-rear-

ing and surplus honey production do not go together.

Being pressed for time I am unable to give facts as they appear in my actual practice, and must leave these few lines for what the convention can get out of them. The request came unexpectedly to me and so I am not prepared to enter into more minute details in the queen-rearing business, and in what respect, each time, it retards the honey supply. To do justice to the subject would require days of hard and careful work to prepare manuscript. I hope that the discussion of this subject will bring out lots of good points for the fraternity.

D. J. BLOCHER.

Mr. Dadant—Personally, I ceased rearing queens years ago because it was a most unpleasant business; but I think, as a honey-producer, I should not rear queens. A record honey-producer of Colorado, Mr. Gill, told me it did not pay him to rear queens. He buys from 300 to 500 queens every year, and found it very much preferable to rearing queens. He said that a man who produces honey on a large scale has no time to devote to queen-rearing; that he can do a great deal better business by not mixing the two.

Mr. Huffman—I have done both, but not very extensively. I find I can buy queens cheaper than I can rear them.

Pres. York—May we not hear from Mr. Stanley?

Mr. Stanley—I will leave it to the others to decide whether they should rear their own queens.

Mr. Huffman—He is too modest to advertise!

Pres. York—Mr. Stone, do you do both?

Mr. Stone—I never did; only just queens to use when I was dividing colonies. When I first began (I kept bees a good many years ago) I increased wholly by artificial swarming, and I reared queens enough for that. I don't believe there is any drawback in rearing queens that way. I place a frame of brood from one of my best colonies into one of my poorest, and just behead the queen in the poor colony, and then let them rear the cells, and insert them in the hives after dividing the colonies—in both the old and new ones. There is, of course, a little more delay where you destroy

the old queen and rear a new one, than if you would buy a new queen.

Pres. York—I think, perhaps, the question means as to commercial queen-rearing, and not on producing queens for your own use.

Mr. Huffman—I think that is the trend of the paper.

Mr. Stone—The point Mr. Dadant spoke of, the extensive producer would come in there along the same line that my experience indicates.

Texas and Other Southern Queens.

"Is it advisable to purchase queens from as far South as Texas? Who has had experience in buying queens as far South as that, and what has been the experience—is it advisable?"

Pres. York—I understand that queen-breeders as far South as Texas have been busy every season. I thought that some one who had bought queens from Texas would state whether or not they found it advisable. Mr. France, have you anything to say on that question?

Mr. France—I know of one man in our state who, very early in the spring, as soon as the bees are out of the cellar, opens the hives, to investigate, to see if any of them are queenless, and he immediately sends to Texas for queens. The climate there is such that they have queens in stock ready for him.

Pres. York—Do you think there is any difference between the Southern queens and the Northern queens, for honey-gathering?

Mr. France—Not in regard to honey-gathering, Southern queens have not been so good the following season; they don't stand our winters. I have been working further north in purchasing queens, to overcome that to a certain extent.

Mr. Huffman—I have never gotten any queens from Texas, but I have had them from Tennessee; I got some farther north, and they did fine. I don't see any difference between the Southern and the Northern queens. They will all dwindle down in the winter, and I don't see that those from the South do so any more than the Northern queens. I had some last year from Ohio, and those bees dwindled just as badly as those that I got from Tennessee; but in the summer time you could not ask for anything better.

Mr. Dadant—It would take a longer time than the bees have spent in Texas to make a difference as to their wintering qualities. The bees in Italy (I know, because we imported so many), although living in a warm country, winter as well as our black, common bees. We have had bees from the neighborhood of Venice mostly, and it hardly ever freezes in Venice, and the bees of that country winter just as well as our common bees; so it seems to me that it was more likely accidental than otherwise if those bees of Mr. France's from the South did not do so well in wintering. But there is no doubt that climatic conditions have something to do with the quality of the bees. Not very long ago my attention was called to the fact that the Italians fought the moth better than the common bees; none of us had thought of, that it was due to the fact that the moth does not and then the man brought out what get winter-killed, and they have to fight it the whole year round in Italy. The Italian bees fight the moth better because they live in a country where there is no winter, and the moth hatch from one season to another in great numbers all over the country. There is a point which very probably is caused by climatic conditions. Whether there is anything in the difference in the wintering, I doubt, owing to the experience we have had.

Mr. Huffman—I am pretty much with Mr. Dadant, and I made up my mind there was little difference whether the queens came from the North or from the South, and I still send to Tennessee for queens.

Mr. Wheeler—Why do you buy queens?

Mr. Huffman—I can buy them and get them more quickly than to rear them.

Ten-Frame Hive with Nine Frames.

"Is it advisable to use nine Hoffman frames and a division-board in a ten-frame hive, after the hive has been in use five years?"

Mr. Huffman—After one year.

Mr. Dadant—Nine frames are too small.

Mr. Huffman—Last spring I had a little trouble in ordering 100 hives. I thought I would get the same size as I got before. When they came they were larger, one-fourth inch. I didn't

notice the difference until I had them half nailed. I wrote to the parties that I didn't like them. They said they had increased the space on account of the width of the ten frames. That is the only objection I have to changing the number of frames. I do think the thing to do is to use nine frames for extracted honey.

When I use them one year the bees will stick them up with glue and I can't get the frames out at all. In that way I don't have much more space than with eight frames with division-board in, and I think they should have made the ten-frame hive on the same ratio.

Sec. Dadant—Why not use the Langstroth frames, and you will not have those sticky Hoffman frames?

Mr. Huffman—I have gotten so that I like the Hoffman frames, even if I didn't make them.

Mr. France—There is another point in favor of nine combs, in that, if you have ten frames in a ten-frame hive-body, you have the old comb to contend with each time, and if you put nine in, you have new drawn out comb at the end, which makes it very much easier in uncapping.

Mr. Bull—I use only eight frames for extracting supers in a ten-frame body; never think of using any more.

Mr. Conrad—That is my experience, too; I use only eight in a ten-frame hive for extracting.

Mr. Huffman—I would like to ask Mr. Bull one question in regard to his frames, eight in ten-frame hive, what does he do with them when he wants to use them in the brood-chamber?

Mr. Bull—I put them back in the brood-chamber.

Mr. Hoffman—Do you cut them down or let the bees?

Mr. Bull—I do.

Mr. Stone—I don't see any use in having to put them back in the brood-chamber.

Mr. Huffman—Sometimes you have not enough and want extra frames.

Hybrid vs. Leather-Colored Italian.

"What is the difference in color and general characteristics between the hybrid bee and leather-colored Italian?"

Mr. Huffman—Liable to sting worse.

Sec. Dadant—What cross, the black bee hybrid, Italian and black? The Italian and Caucasian won't.

Mr. Huffman—Italian and black. I meant brown bee or black bee; that has been my experience.

Mr. Smith—Would a black bee crossed with an Italian—would the progeny sting worse than the black bee?

Mr. Dadant—My attention was called at the International Congress at Paris to the fact which I had noticed but had not thought of, when I visited our neighbors who had black bees, whose queens had mated with our drones, their bees were gentle, but when our Italian queens mated with their black drones, our bees were cross. I had not found the reason for this. At that congress we were told by a man of experience, that the mental qualities came from the male; the working qualities came from the female, therefore the mixture of the Italian queen with the black drone would give the qualities of the black bee as far as temper was considered, and the quality of the Italian bee as far as working ability was concerned. I have rather seen it proven than contradicted since, by facts.

Mr. Smith—My question is not answered. Will the cross or the hybrid sting worse than the pure black bee? Suppose an Italian drone had mated with a black queen, would that progeny sting equally as bad as the black?

Mr. Dadant—The mating of a black queen with an Italian gave the bees the same disposition as the Italian—gentle bees; while on the other side, if anything, I believe the cross disposition is increased in an Italian queen mated with a black drone, and will give a still crosser colony of bees than the pure black. Mr. Baldridge, will you give us something?

Mr. Baldridge—I don't think I could throw any light on that subject.

Second-Story Extracting Frames.

When running for comb and extracted honey in a ten-frame hive, what extracting frames are recommended for the second story, the Hoffman or the shallow extracting frames?

Mr. Huffman—Keep the two separate; don't produce comb and extracted in the same hive.

Sec. Dadant—At the Springfield Convention they decided you might produce both in the same hive.

Mr. Huffman—Are we right?

Pres. York—That is, "different localities," you see!

Mr. Huffman—Years ago I used to do that way; later on I found from my own experience that was not the way; while getting the frames filled for extracted, and taking it away, you don't get any work on the comb honey until those combs are filled again.

Mr. Kannenberg—I have practiced the same thing, and find it is no good; put comb honey over extracting frames, and the bees will never build it out the way they ought to.

Mr. Dadant—How about putting it under? Did it make any difference whether you put it above or below?

Steam-Heated Uncapping Knives.

"How many have used the steam-heated uncapping knife?"

Mr. France—Three years ago was the first that I used it, and, with the first one, the steam went in to the end of the handle; it heated the handle too much. Then the next one, the steam went in at the heel of the blade, and out at the point of the blade, there being a little hollow brass piece on the upper side.

Then we tried putting a partition there (illustrating) through the center, running the steam in on one side and letting it go out at the heel. Unless you keep up considerable steam you will have a little condensation and water. You want plenty of steam. I would not go back to the old knives under any condition. When my son went to California, to take charge of a couple thousand colonies of bees the past season, he said, "Papa, if I am going out there, I have to have that steam knife." I got two, and he took the extra one along.

So far as the practical working is concerned, at 2 cents a day for kerosene oil, he has been able to do the work with one knife that heretofore took three men with the common uncapping knife. The steam is generated in an ordinary gallon, square honey-can, with just a little hole put in, and a short nozzle in which a piece of rubber hose is slipped on. That is set on an oil stove. We had that in the building at first, but found that it made a little additional heat, and sometimes the current of air would cause the lamp to smoke, and we would have the smell of the lamp, so we put the lamp outside the building, and we

have no heat, no smoke, and no disturbance of the lamp in the house at all. I have tried three uncapping machines (yes, I have four); there are good features in the uncapping machines, but as yet they need to be further completed. A steam-heated knife is always clean. You know how nice a knife is, brought out of hot water—how nice it cuts. The steam-heated one goes that way all day long, and when you come back from your dinner the knife is ready for business.

Sec. Dadant—Where did you have these knives made?

Mr. France—I bought mine of the Root Company, at \$5.00 for the knife and a piece of hose; that is a pretty cheap "uncapping machine" compared to the cost of the others.

Mr. Huffman—What do you use, the Bingham knife?

Mr. France—The Bingham knife, with the piece on the upper side.

Pres. York—Does \$5.00 cover the stove and everything?

Mr. France—No, I had the stove—that cost \$1.80; but I use that to put in comb foundation, and for other purposes at other times of the year. The knife and hose cost \$5.00.

Mr. Huffman—Mr. France, and Mr. Hofmann, of Janesville, Minn., are the only two that I have talked with as ever having used them. Mr. Hofmann claims for them the same as Mr. France does; this year he said he took 50,000 pounds of honey with his uncapping knife.

Pres. York—We will call on Mr. Dadant for something on "Further Laws Needed by Illinois Bee-Keepers."

Mr. C. P. Dadant—I wrote a little essay, but did not take into consideration what Dr. Miller urges us to have—that is, the anti-spraying law. The reason I did not was that when we tried to have that law, we were plainly told if we did not bring more facts it was out of the question for us to secure such a law, and I must say that the facts concerning the damage done to bees caused by spraying are not sufficiently numerous at the present for us to feel that we can get anything, although in a year or two accidents may happen in such numbers that it will become imperative to secure a law. I don't think there would be much difficulty in getting that law, if the damage done was very great. But we

have other questions. I will read what I have written:

Do We Need Other State Laws on Bee-Keeping?

The success achieved in securing the present law in Illinois on foul-brood, and the appropriation for the State Association, have furnished us clear evidence that our State will take care of deserving industries, and that the only requirement is to make our wants and needs well known by concerted action.

In the interview which the Legislative Committee obtained from the Governor of Illinois last winter, and in which we brought him proofs of the growing need of a foul-brood law, he expressed himself as very willing to help our industry, and after making different inquiries concerning the status of bee-culture, he suggested that there should be an apiary department at the State Agricultural College, with an experimental station. He also said that he was satisfied that such a department could be secured, if enough pressure was brought to bear upon the Legislature.

Would there be anything to gain from such an experimental station? I think the reply to that question would be in the affirmative, provided the right kind of men were put in charge. Not only is there a great field for investigation and work in the matter of brood-diseases, since they have not yet discovered the microbe of the so-called European foul-brood; but we need information concerning other bee-diseases, paralysis or May disease, for instance. Many experiments could be made also on questions relating to bees and their products, on the relation of cost of wax to honey, on the comparative production and cost of drones in large apiaries, on new honey-plants and their cultivation, and on a hundred different questions relating to this special industry. Such a department could also be relied upon to teach bee-culture and spread its active practice among farmers. Statistics tell us that there are over 35,000 bee-keepers within the State, but how many among them are practical honey-producers, and sufficiently informed to carry on this industry with success? Probably not more than one in a hundred.

This 35,000 is taken outside of the incorporated villages and cities, and I

think there are some of you at least here who live within the precincts of incorporated villages or cities.

This is direct from the Bureau at Washington. This is not second-hand information. I think it was a trifle over 35,000, if I remember correctly.

It is true that some bee-keepers think that the field of apiculture is already overstocked, that honey would sell better if less of it was produced. The facts are, that it is the large production which creates a demand. There was but little demand for oranges in America until long after orange-growing became popular in California. At present a thousand oranges are sold where ten overstocked the market forty years ago. The demand was created by the large supply seeking sale. The more honey produced the greater demand will be created for it.

I think it is a great deal, in the thinking that the field of apiculture is already overstocked, like the story a German once told me. He had just come over from Germany, and could barely speak English. I said, "You have moved from Germany; you didn't do very well over there?" "No," he said to me, "it is very hard to find work there." I said to him, "the great trouble you have there is in having so large a standing army." "Oh, no," said he. "It is a great deal better; if those men were turned loose there would not be work for anybody." He didn't take in the idea that they have to feed those men and take care of them. He was looking at it from the wrong side.

It would be best if the State experimental stations could be established as branches of a National Bureau. This would give greater facilities. But I wish to suggest that it is doubtful whether making bee-culture as a branch of the entomological department is best. There are so many thousands of injurious insects which need special investigation that the honey-bee and its study ought to be made separate work. Not only is there enough for special microscopists and bacteriologists, but there is in this line a demand for practical apiary workers, whose education will be on entirely different lines from that of the entomologists proper.

I can best illustrate my meaning by suggesting that the growing of silkworms, although a branch of entomology requires special practical

knowledge, and that it would be as irrational to employ a bee-keeper of ability to experiment upon it as it would be to employ a grower of silkworms to experiment upon the habits of the codling moth, the curculio, the chinch bug, the potato beetle, etc., and the remedies against their depredations. Our country has grown enough that we need specializing, and I believe bee-culture has shown itself useful enough to demand special attention.

When we can get Federal action upon these matters, with the States as members of a federation of this sort, it will be best. But until then there is no reason why a large and prosperous State, such as Illinois, cannot secure a useful experimental station.

There are many among our friends who think that either State or Federal action is inadequate because officials are too formal and not practical enough. But I believe that a very practical demonstration is being made of the possibility of active work by the Government in the present opening of an inter-oceanic canal at Panama. The country as a whole is in a position to do things that no individual or group of individuals could ever achieve.

The Chicago-Northwestern Association is influential enough to recommend State action, not only in its own State of Illinois, but in the two or three neighboring states which are here represented by delegates. I trust the matter may be discussed. Even if it takes twenty years to secure full recognition it is worth while to make efforts in that direction.

C. P. DADANT.

Pres. York—Has any one else anything to say on this subject?

Mr. Dadant—I wish to emphasize the statement made by the Governor of Illinois. We came to him, armed with proof of what we needed, and he was convinced that we did need that for which we were asking. He said: "Your industry ought to be recognized; we give the horticulturists a great deal of attention; we think you need some school, some teaching on this subject." I think if we had come to him with that kind of a request we would have secured it, but our ambitions didn't extend that far. Bee-culture is in its infancy; in the course of time I think we can secure such additional laws as

we need, if we stick together and discuss these questions among ourselves.

Mr. Stone—The Committee on Resolutions of the State Association asked for an Experimental Station at Champaign, controlled by the State Entomologist. I think it would be a good thing for the Committee on Resolutions to consider that in this convention. We might pass a resolution and put it in their hands, or suggest this to them. Did they not pass a resolution asking for an independent department? Did you say, "controlled by the State Entomologist?" I am in favor of an independent department.

Mr. Dadant—If there is nothing further, we have here a resolution that was passed by the State Bee-Keepers' Association, and which I think it would be well to have read here, and have the Association, if they see fit, endorse the action of the President in signing it in the name of this Association.

Sec. Dadant—Here is the resolution—See Resolution printed in the State Report, Page 69.

Mr. Dadant—My suggestion is to have this Association, if it sees fit, approve the action of its President in this matter. I move that this resolution be endorsed, and that the action of the President in signing it be endorsed by this Association.

The motion was seconded, put and carried.

Preventing Honey from Souring.

"How can we prevent good extracted honey from souring?"

Mr. Huffman—I don't call it good when it sours.

Mr. France—We look at that rather with ridicule, and yet I call to mind a case where one of our Wisconsin beekeepers wanted me to go to a dealer, to whom he had sent his honey and received no returns, but got a reply from him that the honey was not good, because it was sour. I investigated, and found that the dealer had not sold it during the honey season, and had stored it away in a damp, cold cellar. It had taken on moisture, and the top of the honey, in barrels, had soured. It was good honey when it was sent there.

Mr. Kannenberg—I know that honey does sour, and good, ripe honey, left on the hives until fall.

Mr. Dadant—The leaving of honey on the hives until fall is not proof that it

is well ripened. The consistency of it will tell you whether it has ripened. I have seen honey sealed by the bees burst the cappings. People will tell you that sealed honey is ripe. Not always. Bees make mistakes. Some times they seal honey that is not ripe. I remember one case similar to Mr. France's, where the honey was called sour, and it had been good. I believe Mr. Kannenberg's case is due to its not being sufficiently ripe.

Mr. Kannenberg—Why should it not ripen in the house, then?

Mr. Dadant—I doubt that it had enough heat.

Mr. Kannenberg—We had good heat the past summer, and if it would not ripen then, it would not ripen at all.

Mr. Wheeler—I would like to know if there was any bee-bread in the combs extracted.

Mr. Kannenberg—None.

Mr. Wheeler—I had that trouble years ago—honey souring. Since I have cut out every bit of brood-comb from the extractor I have not had that trouble.

Mr. Stone—My experience has been, I don't care how ripe the honey gets, if you leave it on until the nights are cold, in the fall of the year, the heat of the honey and the coldness outside will make the honey gather moisture, and that moisture will sour the honey. I have had it sour in hives after leaving it on too long—just in sections I have had it sour and get to fermenting in the hives if left on till the middle of the winter.

Sec. Dadant—What time of the year was that honey gathered?

Mr. Kannenberg—Late in the summer.

Sec. Dadant—Any grapes or peaches near that locality?

Mr. Kannenberg—No; sweet clover and some other flowers.

Mr. Huffman—I have had a similar experience, but it was always fall honey. Several years ago I had nearly two barrels of fall honey. I kept it over to feed the bees, and quite a little of that honey soured on top of the barrel; I laid it to the honey not being ripe—not having ripened.

A Member—How far down did it sour?

Mr. Kannenberg—It must have been a foot at the top of the barrel; of course, thin honey comes to the top.

Mr. Dadant—Mr. Stone made a point there that I think is valuable. There is no doubt that honey gathers moisture readily. You have all had honey in tin cans, and when it was cold, and you had to warm it, your tin cans "sweat." That was because the honey inside was cold, and it took a long time to warm up, and the moisture in the atmosphere settled on the cans. If a warm day comes, generally in the warm days in the fall or spring the atmosphere is loaded with moisture, and the cold honey causes condensation of moisture upon its surface, that is damaging to the honey.

Mr. Stone—There is not anything in nature but what is a lesson for us. You go along the street and look through these large plate glass windows. There is never one of them put in but what there is a drainage on the inside to take the water off that accumulates from the heat or cold on the outside or inside. Farmers have learned that regarding their seed corn, no matter how dry it was when it was harvested, we have to put it in a place where it will not gather moisture. You see advertisements for metal roofs. I have a nephew who put a metal roof on his automobile shed. He had to take it off. The heat and cold would make it sweat, and he had to put on a wooden roof—and a bee-hive is no exception; just as soon as there is a different temperature on the outside from that on the inside, there is moisture going to gather.

Mr. Kannenberg—Those combs, when they were taken off the hive, were not extracted the same day. I had them at least a month before they were extracted. It was warm where they were kept, and if that honey had not ripened on the hive it would have ripened there. It was over 120 degrees in that attic.

Mr. Stone—I canned tin cans of honey and put the cover on while hot, and when I took the cover off the water would drip off from the inside of the cover into the honey.

Mr. Dadant—That is not the same as condensation of atmosphere. When you heat honey you have lost by evaporation. You are simply wasting some of the water contained in the honey. When you heat honey and put it in a vessel while hot, and cover the vessel, it is the moisture of the honey itself that condenses, and it is all right, it belongs there. The condensation I

speak of, on a warm day, after cold weather, is the condensation of warm air. You can see the same thing in the pavements of the street. You have all seen on a warm day, after a cold winter's day, those granitoid pavements wet. They condense the moisture in the atmosphere on a warm day. It is the same thing with a bucket of honey that is cold. It is the condensation from the outside that comes on the jug or pail or pitcher or decanter. The fact that the honey sours proves that the moisture gets there somehow. You all know that honey contains water; you can prove that. I would think that his honey contained a surplus of water; if it did not, it should not sour; and if it did not contain a surplus of water it must have gathered it from somewhere.

Mr. Smith—It seems clear enough to me. I may be mistaken. The atmosphere at a temperature of 120 will take up a great deal more moisture than atmosphere at 80, much more in proportion. When he put his honey in the can and left a space above that honey, between the honey and the lid, and heated it to 120, some of the water in the honey evaporated and filled the space between the honey and the lid; it would do that if the honey was granulated. Now when that can of honey got cold again, the moisture was on top. It belonged to the honey, as Mr. Dadant said, but you could not put it back and mix it all through the honey; when it dropped back it was right on top; that made the honey on top much thinner than at the bottom, and when it reaches below a certain consistency it will sour. I think if he could have examined his honey carefully at all times he would have found a scum on top the honey, and that is what soured, and it would gradually go down and spoil all the honey.

Mr. Kannenberg—My honey was not heated up to 120 degrees when it was extracted.

Cause of Bees Dying Outside of Hives.

"What is the cause of bees going out of the hive and dying?"

Pres. York—I am sure we will all agree that there might be more than one cause.

Mr. France—Can you tell the cause? I have noticed it this fall more than usual. I don't know but I am wrong

in the reason for it, but I think it is due to the extreme cold weather. I have had a number of bees die near the hive-entrances this fall. I have had bees perish in the hive with an abundance of honey right where they were clustered. I think it was due to the sudden change in temperature.

Mr. Huffman—I put that question in. These bees Mr. France knows, because I had him down there to look at them; it was the commencement of gathering of white clover honey. I am satisfied half of the bees in those colonies came out and died right on the ground; it seemed like paralysis, but it was not paralysis. I never saw anything before nor since like it.

Mr. France—You are getting on another topic. This calls for the dying of bees in the latter part of the summer.

Mr. Huffman—I didn't designate the time. I should say it was in the clover honey season.

Mr. France—Paralysis, largely, in your case.

Mr. Stone—What was the cause of paralysis?

Mr. France—Many times, the lack of good vitality of the queen. A new queen will overcome that.

Sec. Dadant—Do you mean to say that is the only cause, a queen not being vigorous enough? Won't they cure themselves of that paralysis without changing the queen?

Mr. France—Many times they do, but they are cured more quickly with a young queen.

Paralysis in Bees.

"What causes paralysis in bees?"

Mr. Huffman—Mr. France says, change the queen. I have let them go, and not changed the queen, and the next year they have come out all right.

Mr. Dadant—This question of the cause of paralysis in bees ought to have been answered before this but I think it is still a question. Paralysis in bees is also called "May disease," constipation; the disease of the Isle of Wight, for if any of you read the English papers, you have read of their having a disease in the Isle of Wight which corresponds to the description of paralysis. Vertigo, described by a professor in Italy, is the same thing as paralysis. Examine the intestines of every one of those bees, and you find

them loaded with matter that is very offensive, that they cannot discharge. Usually it begins, in this country, at the end of winter, the last of April, or beginning of May, and lasts sometimes longer. In Italy, six or seven years ago, they had it to a great extent; apiaries were almost destroyed in many instances. They called it "May" disease. The Germans call it "May" disease. The French call it *mal de mai*. We call it paralysis, but it is not. The disease begins with the loading of the intestines of the bees, and when they get so far gone they can hardly crawl, we notice it, and call it paralysis. It appears in Italy, and in the Isle of Wight; it is also found in Florida, in Southern California. Major Merriam, of Southern California, has between 500 and 1,000 colonies. I wrote to him when I found his bees had it. We were unable to bring out anything in the way of light on the question. Our friend in Florida, Mr. Poppleton, gives his remedy, to sprinkle sulphur over the bees. His remedy is murder. It kills the bees, and that puts an end to the disease. What we want is something to stop it as soon as it begins. In Italy is recommended the mixing of honey with strong herbs; some mix peppermint with honey, and others a little wine, but that would not do for our prohibitionists! It is very strange that this disease should exist all over the world, as it does, and only at certain times. In Hamet's Book of Bee-Culture, he speaks of it as having been very severe in 1864. Since that time we have taken their bee-papers right along, and I have seen it mentioned but very little. Dr. Zander says it is a small insect which exists in the stomach of the bee, which causes the disease, and calls it "nosema apis."

We hope that each one of you will try to discover the cause of paralysis, or May disease, and let us know. It happens nearly everywhere in May. Here in the North, Doctor Miller has found it in May, and it is found then in Florida, and in California. That it should happen at the same time of the year, in different countries, is astonishing. A great many charge (in Italy) that it is due to certain plants, but the plants they have in Italy are not the same as in Florida or in California.

Making Honey-Vinegar.

"What is the best way to make honey-vinegar?"

Pres. York—I think Mr. Arnd has had experience in that line.

Mr. Arnd—By the "short process" it means that you will have to get generators, and they cost a lot of money; Mr. York and I know that; and when you start making vinegar in a generator you not only must have your surplus waste honey, but you must have about 60 pounds of good honey a day if you have no waste honey to put in to keep the generator going. The generator must be kept alive, just like a fire. If the wood all burns up you will have to start it again, and to start up a generator costs a good deal of money, so that if a person wants to go in for the quick process, he must be able to have at least 60 pounds of honey a day to keep it a going.

By the "long process" it is just about the same as making cider vinegar. You take about a pound of honey to a gallon of water, and put it in a barrel; start it to fermenting, and allow it to stand a year or two; if you allow it to stand two years you will have good honey-vinegar. I am making two barrels now of honey-vinegar by the slow process. By the quick process we made, I should think, about 40 or 50 barrels, and we got so much vinegar that we didn't know what to do with it, because we could not afford to sell it for the price people were paying for vinegar at that time. It was selling, at wholesale, on the market, for about 12 cents a gallon, and we had to compete with some vinegar that sold at 3 and 4 cents a gallon.

We practically got the people educated up to honey-vinegar when we had it all sold. I am taking some orders now, as soon as I have it made, and they are willing to pay 75 cents to \$1.00 a gallon. If you can educate the people to the use of honey-vinegar, it will pay you to put some honey in it to make it.

Mr. Stone—What kind of a place does it have to be kept in during the process of making?

Mr. Arnd—A warm place. You can put it out-of-doors in the summer. You must have a temperature of about 70 degrees or more to keep the thing fermenting. You make honey-vinegar just the same as you do cider vinegar;

only you add the right proportion of honey to rain water. (Rain water is better than other water.)

Mr. Stone—It does not take two years to make cider vinegar.

Mr. Arnd—It will take two years to make good honey-vinegar. The honey-vinegar we make, people say, is worth two or three times as much as any other vinegar, because it has to be reduced more than half before it is used.

Mr. Stone—Could you not hurry it and make it in one year by putting in a little yeast? We made it so good one year that it took the blue ribbon at the Fair.

Mr. France—What density did you say you had with the slow process?

Mr. Arnd—Just off-hand, I should say a pound of honey to a gallon of water will make a first-class vinegar.

Mr. France—You don't give it any actual test with a saccharometer?

Mr. Arnd—When I made honey-vinegar by the quick process, everything was weighed out, and done by rule. I cannot remember the figures.

Mr. Dadant—How about clarifying it?

Mr. Arnd—In the quick process, it goes trickling down through the beech shavings, and when it comes out at the bottom it is perfectly clear. I have not decided how I am going to clarify by the slow process. They say, "Run it through nice, clean sand" is one of the best ways of clarifying it.

Mr. Stone—My vinegar was kept down in the cellar, where there was hot water heat in the winter time, and I never set it out-of-doors at all.

Mr. Arnd—Mine is in the basement now, where there is heat all the time, but in the summer time it is quite cool there.

Mr. Huffman—Do you add any sweet to your vinegar already made?

Mr. Arnd—I have one barrel I am not doing anything with. My rinsings and waste honey go into the other barrel. If I were going in it right along, I would weigh out the honey scientifically, and make it out of good, straight honey.

Mr. Dadant—I believe it is really best to make the honey-vinegar by this quick process. You don't have any foreign matter; you don't have the little vinegar eels forming. If you have vinegar that has been made a few months, if you will take a thin

vial such as the druggists use for selling you a drug when they wish you to think you are getting a great deal and you have only a few drops—if you take a little, flat vial and pour vinegar in and hold it to the light you can see these little eels. The vinegar eel is the “anguillula aceti”, coming from the French word “anguille”, which means an eel. It has a large head and a long tail. They wiggle in there just like an eel in a pool of water. I suppose each one of us has eaten millions of them in his lifetime. I had a bee-keeper write to me that he had a barrel of vinegar entirely spoiled, filled with worms. I told him that was evidence that it was good vinegar. If it were vinegar made of sulphuric acid it would not be vinegar; there would not be any eels in it. To destroy them, heat your vinegar 160 or 180 degrees, those little eels die and fall to the bottom; draw it off and your vinegar is clear. We always make vinegar by the slow process. When we have mixed honey and water and we don't know the strength of it we use an egg, we want the egg to float so as to show about the size of a dime at the top of the water. If it is very strong in honey the egg will rise more, and the more honey there is the more the egg will show. It will take two or three pounds of honey to the gallon to make the egg show $\frac{1}{3}$ of its size. If the egg shows less than the size of a dime at the top we add more honey, if it shows more we add more water.

A Member—I suppose this has to be a fresh egg! (Laughter.)

Mr. Arnd—There is one thing in making vinegar by the quick process—if you don't have enough alcohol to feed the bacteria, the bacteria will turn around and consume the alcohol, and then your generator will become dead. I would not guarantee to start a generator for less than \$50.00.

Mr. Dadant—Mr. Arnd calls my attention to something. You must make wine or mead out of your honey before you can make it into vinegar and the nearer it will be to an alcoholic substance the better it will make into vinegar. If you have vinegar that is sweet and sour at the same time you have poor vinegar.

Mr. Arnd—Mr. Dadant spoke about making it into mead first. I had a man working for me who liked to drink, and one day he got intoxicated

on this mead; it was worse than drinking beer.

Mr. Huffman—How do you work it to keep the “mother” out of it?

Mr. Arnd—You have to keep the “mother” in it until you sell it.

Mr. Stone—In case of the disappearance of all that alcohol from it, can you bring it back to a condition when the alcohol will be there?

Mr. Arnd—You can add honey and start it fermenting again, of course that will make alcohol. Alcohol is caused by fermentation.

Mr. Stone—Or would you do better to throw that away and start anew?

Mr. Arnd—No, I think not.

Mr. Dadant—I wish we had some of those European scientists who have gone through this work thoroughly. It is difficult for me to remember their statements. They say that in the flowers there a number of germs of fermentation, and some of those germs which go with the honey are germs that cause rotteness. There is a chance when you make vinegar, if you don't have alcoholic fermentation, of your liquor actually rotting. I have had vinegar that was not very well cared for and when our friend, the former Secretary of this Association, Mr. Moore, asked me for samples I sent them to him, he said they were inferior. I concluded as we had not taken care of the vinegar it had some of those germs in it. If you heat your honey to a point where the germs will be destroyed, then get the alcoholic fermentation pretty well through, and then put in your acetic fermentation you won't have those things.

My wife once complained that our honey-vinegar ate up the pickles. Some one suggested that if she put half water in it it would be all right, and then would be as strong as cider vinegar. She thought we made the vinegar too strong.

Mr. Arnd—Don't you think this putrefaction you mention is caused by not having alcohol enough? The bacteria turn around and eat it up.

Mr. Dadant—That is new to me, but there is no doubt that the alcohol destroys other germs. Alcohol is a preservative. If you make your liquid strong enough, and have the alcoholic fermentation thoroughly done before the acetic begins, that will destroy the germs. There is a point where the alcohol destroys its own germs of fer-

mentation. Perhaps this is irrelevant to the discussion, but I learned from Major Merriam in California, that when they make wine of grapes, they wait until it is up to a certain point of fermentation, and then pour in brandy to make Port wine, and when they reach 14 and a fraction per cent, the fermentation is stopped entirely and the wine clears up. The alcohol destroys the very germs that caused it to come into being. You can make wine that will remain sweet, and, of course, you could make vinegar that would also remain sweet.

Mr. France—There was one point about honey-vinegar: I had to throw away one batch of two barrels on account of a per cent of honey too much. It started nicely, and then the acidity reacted, and it became dead, and stayed right in that condition, and I kept it two years, and then had to throw it away. The egg in that lot would float quite high, showing that there was an overload of honey.

Mr. Dadant—What do you think of the measure I gave?

Mr. France—Just floating a hen's egg has been my thermometer for some while. In this case I mention I calculated to add water to it, but it slipped my mind, and it was set aside, and it started fermentation. It got far enough along, if you please, so that the boys were having a good time in the bee-yard on the mead, but it stayed in that condition for two years, and I finally threw it away.

Mr. Stone—There is a question as to whether it is possible for a condition to come about when the bacteria feed on themselves and destroy themselves; that is the case with some bacteria. If they did that, it would do just what Mr. France says.

Mr. Dadant—I believe that is what Mr. Arndt meant.

Shallow Extracting Frames.

"Is the shallow extracting frame preferable to any other?"

Pres. York—How many have used the shallow extracting frames? (Quite a number.) Are they preferable, and why?

Mr. Stone—I took stand against them in the Springfield meeting several years ago, when the other fellows said that when the colony was not a very strong one, they would put on

shallow frames instead of deep frames. My plan was to put a section case on the weaker colonies for comb honey, and, on the strong colonies, brood frames for extracting. I stand for deep frames for extracting and sections for comb honey.

Mr. Kannenberg—I use the shallow frames. When I lift a super, I can carry it easily; but if I have the deep frames, and they are pretty full, it takes a pretty good sized man to carry them. I use the regular Hoffman shallow frames, 5 $\frac{3}{8}$ inches deep.

Motion to adjourn put, seconded and carried.

SECOND DAY—AFTERNOON SESSION.

Pres. York—The first thing on the program this afternoon session is: "The Honey Bee and the Average Horticulturist," by Mr. E. J. Baxter, Nauvoo, Ill.:

The Honey Bee and the Average Horticulturist.

The subject assigned to me, viz.: "The Honey Bee and the Average Horticulturist," is a very interesting one, as well as very important to both the practical apiarist and the fruit grower.

The mutual relations and dependence of the two should be more generally and more thoroughly understood, and it devolves on the bee-keepers, individually and through their organizations, to spread this information broadcast among agriculturists and horticulturists so as to educate them to a realization of the very important part played by the honey bee in the economy of nature, and their absolute necessity in the pollenization of flowers generally.

It is held by well informed naturalists that there are about sixty species of insects in the United States (more or less widely distributed) that help to pollenize our flowers. It has also been well demonstrated that the honey bee plays a more important part in this work than the fifty-nine species of other insects combined. Practical fruit growers of long experience who have made experiments and observations along this line, know that it is an utter impossibility to grow some of our fruits in paying quantities, without the aid of the honey bee to pollenize

the flowers. To prove this I will cite you to the case of cherry growers of California who were growing big crops of cherries, and who had the honey bees banished from their locality because they claimed that they were the cause of blight in their pear orchards, when their cherry trees, although full of bloom every year, ceased to bear any crop until the bees were brought back again. The exact facts in this case, I presume, can be had from the Secretary of Agriculture, at Washington, D. C., as his department made the investigation and reported the results as above stated.

We can also refer to the wild goose plum for instance, the Keifer pear, all of our pistillate strawberries, and probably many of our other fruits of whose fertility we know, as yet, but very little positively. I have usually had the good fortune to have a good crop of these fruits to set; thanks to the agency of my bees and to the proper variety of fruit to produce the pollen required. While I have been successful in getting good crops of these fruits to set, many of the fruit growers about me have not been so successful for various reasons. Some have failed because they did not have the right variety to produce the required pollen. Bees, by themselves, are not all that is needed. You must have the right variety of fruit to produce the pollen required to fertilize the self-sterile variety. If you have this the bees will see to the distribution of the pollen and thus accomplish the cross fertilization of the flowers. Others have failed because their orchards or fruit plantations were too far away from the location of bees, thus too few bees visited the flowers in their plantations to pollenize them properly. I have often observed that the fruit plantations nearest my apiaries set the heaviest crop of fruit, and the amount decreased as the distance from my apiaries increased.

I might cite other proofs of the necessity of the honey bee in the pollenization of the flowers of our orchards and fields if we wish to harvest good crops. One more instance will suffice my purpose.

It is a well known fact that red clover very seldom produces any seed at all at the first cutting because the flowers are self sterile and there are not insects in sufficient numbers at

that time of the year to pollenize them properly, hence no seed. The second cutting, later in the year, usually produces more or less of seed, the bumble bees being numerous enough at that time of the season to pollenize the flowers more or less perfectly. This year the first cutting of red clover produced as much seed in our locality as the best crop that was ever harvested at the second cutting simply because the flowers were thoroughly pollenized by the honey bees, the awful drought then prevailing having shortened the tubes of the flowers, making it possible for the honey bees to reach the nectar, thereby inducing them to visit the flowers constantly until thoroughly pollenization was accomplished.

So much for the honey bee side of the question. Now, how is it with the average horticulturist? Does he know all these facts, and if he knows them, does he realize the importance of the honey bee to the success of his vocation? Does he comprehend the mutual dependence of the one upon the other for sustenance and profit, and does he take proper precautions to protect his friends, the honey bees, and to encourage their keeping close to his fruit plantations? From my long experience in this matter, running back several decades and extending over a wide territory, I am compelled to answer, generally, **he does not.**

The average horticulturist, up to the present time, knows very little of the natural history of the honey bee and still less of nature study in general. He looks down on the honey bee as an enemy, rather than as a friend. The failure of his fruit plantation to set a good crop of fruit is attributed to the bees sucking all the vitality out of the flowers. The puncturing of his fruit and their rotting is laid to the bee's sting. These, and many other ideas, equally as false and foolish, antagonistic to the honey bee, have prevailed among horticulturists for ages past, but I am happy to be able to say that these conditions are changing, and changing fast. Owing to the great wave of practical and vocational education that is sweeping over our country, pushed on by our Agricultural Colleges, our Experiment Stations, our Farmers' Institutes, and our Vocational Meetings of various kinds, this ignorance and superstition is giving way to truth and enlightenment, and I believe

that the day is not very far off when the practical horticulturist will recognize the honey bee as one of his best friends.

E. J. BAXTER.

Pres. York—What can be done to increase the interest of the horticulturists in bees, so that they will cooperate more with bee-keepers?

Mr. Dadant—At one meeting of the State Horticultural Society we were invited—that is, the State Bee-Keepers' Association was invited—to be present and discuss the influence of the honey bee upon the flowers. We found the horticulturists were all with us with one exception. He thought the bees injured the flowers, but he was sat down upon by the other horticulturists in such a manner that we saw they had the right idea. The men who attend the horticultural meetings are like the bee-people who attend our meetings. Those who need the education are those who do not attend. How this is to be reached is a matter that ought to be pretty well ventilated.

Pres. York—There ought to be some way, it seems to me, whereby bee-keepers could get horticulturists to appreciate the value of bees in horticulture. How can it be done? Mr. France, have you any suggestions to make on that?

Mr. France—How it is to be done is a hard proposition, but I think one field we can work in to good advantage is the horticultural literature. Get more of this class of facts in the papers which those people read—in the horticultural and the agricultural papers. But there are many who are horticulturists who do not take the horticultural papers.

I remember in our own State, three years in succession one of the largest orchard men, commercially growing apples, came to our State Bee-Keepers' meeting in the winter, offering a house free of rent to some one who would locate at least 80 colonies of bees in his orchard. Being in the far North, many years the bloom would be of a short period, and he said, "I can't take a chance of the bees being a long distance away. I want them right there and if the house rent is not sufficient, I will pay him wages right along, and he can work for me." He wanted some one to take care of the bees in order to pollenize

the fruit, and he ships apples by the carload.

Pres. York—If such facts as that could be put before the fruit-growers, in the press, I believe it would be a good thing.

Mr. France—There is one other thought. In case the National members want some of the experiments that have been conducted at different State Experimental Stations, and U. S. Experimental Stations, in a little booklet that I got a few seasons ago, called "Bee-Keepers' Legal Rights;" in that book there are about 20 pages on bees and horticulture, with those clippings from different bulletins—we have a limited number left. I have been practicing all the economy I could, and I have loaned them where we could not spare a surplus. I loaned half a dozen copies to be distributed among horticulturists, to read those articles, and then return them, so that I could use them elsewhere.

Pres. York—We will have the report of the Committee on Resolutions, if they are ready now; it rather follows this paper of Mr. Baxter's:

Report of Committee on Resolutions.

Whereas, It has been found by many bee-keepers that some Horticulturists insist on spraying their trees while in bloom; and

Whereas, It is against the best interests of Horticulturists to spray their trees at such a time; and

Whereas, Such spraying poisons many bees, causing a heavy loss among bee-keepers; therefore, be it

Resolved, That the Chicago-Northwestern Bee-Keepers' Association, in convention assembled, this 7th day of December, 1911, recommend the drafting of proper bill or bills for the bee-keepers of the State of Illinois, or of surrounding States, prohibiting the poison spraying of fruit trees while in bloom; and be it further

Resolved, That the President of this Association appoint a committee to gather information and proof in regard to this matter and assist in the drafting and presentation of such laws before the State Legislature.

HENRY M. ARND,
GEORGIA M. WESTON,
LOUIS J. DADANT,
Committee.

Mr. Smith—I move we adopt the resolution.

The motion was seconded, put and carried.

Pres. York—We will have the next resolution:

Whereas, The industry of bee-keeping

and honey production has become of great importance in the State of Illinois; and

Whereas, Bee-keeping could be greatly helped by a proper Department, at the University of Illinois Experiment Station; therefore, be it

Resolved, That the Chicago-Northwestern Bee-Keepers' Association in convention assembled, this 7th day of December, 1911, do hereby recommend the establishment of such a Department at the State University; and be it further

Resolved, That such a Department be placed in charge of practical apiarists, to be appointed by the Governor of the State of Illinois.

HENRY M. ARND,
GEORGIA M. WESTON,
LOUIS C. DADANT,
Committee.

Pres. York—You have heard the resolution, what will you do with it?

Mr. Dadant—I move its adoption.

The motion was seconded, put and carried.

Mr. Dadant—I think a resolution of thanks to the hotel management for the use of this fine room ought to be in order.

Pres. York—I have just reminded the Secretary of that fact. It is certainly a fine place in which to meet.

A Sample Honey-Talk.

"Will Mr. Bull give a sample of his honey-talk when soliciting orders among private families?"

Mr. Bull—Well, when I start out, I take a sample, a 10-lb. can, the same as I sell, and carry 3 or 4 pounds of honey. The first time I go to a place, I go to the back door and knock, and get the lady of the house, if she answers the door, and, if not, I try to get her. I generally ask them if they like nice, pure honey. The answer is generally, "No." Then I say to her, "Will you give me a spoon, and let me give you a sample?" I give them a sample of it, and after they get a mouthful of the honey, they want to know the price, and when you are going to deliver it, and that is about all there is to it. I make my orders two weeks or ten days ahead. They often say to me, "The sample is all right, but maybe what you are going to bring to us will be the same, and maybe it won't." I tell them they can open the can, and if it is not all right they don't need to keep it. The greatest drawback I find is in candied honey. They say to me "Your honey was not pure. It had sugar in the bottom. It granulated." You have to

explain to them how it is, and why it is, and you can convince most of them, but some you cannot.

Mr. Dadant—Why not explain this to them in the first place?

Mr. Bull—The label explains that.

Mr. Kannenberg—What do you tell the butler when he comes to the door?

Mr. Bull—I call for the lady of the house.

Pres. York—I don't think you find butlers where Mr. Bull goes. (Laughter.)

Mr. Bull—I find that the people who work for day wages and on salaries are the people who use the honey, generally.

Bee-Escape for Removing Honey.

"How many use the bee-escape in taking off extracted honey?" (10 or 12.)

"How many prefer brushing?" (1.)

Pres. York—Why, Mr. Huffman?

Mr. Huffman—I like it better, is the reason why.

Maybe I don't know how to use the bee-escape. It is too much trouble to get it under, for one thing. I can get my honey off quicker by using the brush. I don't have to bother with any escape. You have to place the escape on 10 or 12 hours prior to taking off the honey. I drive the bees down, and take the frames right off, and quickly; those bees are all off and run down below; take your frames out and separate them, and in ten minutes you can get through, and you have no bother.

Mr. France—Cut that in two; we take five minutes.

Mr. Huffman—I was going to give plenty of time.

Sec. Dadant—How many supers to the hive?

Mr. France—Two.

Mr. Dadant—Here are two of us; we have tried both ways. We began with brushing bees years and years ago, and we brushed and smoked. Where you have 2, 3, and 4 supers on top, you have to brush every one of them. I have only one objection to the escape; that is, when it is very warm, the chance of combs not having ventilation, and breaking down from heat. We lift our supers in the afternoon, put the escape-board under, and let the supers down together. We do the entire apiary that way. The next morning, all there is to do is to take

off the supers—no bees flying, no robbing, no smoking. You don't get your combs or your honey full of the smell of smoke.

Mr. Huffman—You use too much smoke.

Mr. Dadant—All those things are to be taken into consideration. I ended with the escape. I don't believe I want to go back to the old way. If you have not enough to make it worth while to go the afternoon previous, begin by putting on the escapes early. It is so handy to have your combs free of the bees when you go in the morning.

Mr. Huffman—How do you get your escape-board under them?

Mr. Dadant—The question was asked this morning, "How many use the half-story supers?" We use the shallow supers. I used 100 full-story supers in extracting for a few years in one apiary, and I discarded them for ever more. Our super weighs about 65 pounds when full. We lift those supers and slip the escape-board under. There is a bee-space both above and below the escape. That escape fits exactly on the hive, and the super fits on top; one escape on each hive.

Pres. York—Would there be any advantage in having more than one bee-escape to the hive?

Mr. Dadant—No, we didn't find it so.

Pres. York—Do you find the bees all out when you come back?

Mr. Dadant—There may be a couple dozen bees left; not enough to amount to anything; hardly ever any bees at all.

Mr. Stone—For two or three years I have been using nothing for an escape but a box such as I described in our last Report. I told of it at the Albany meeting. I put a tight cover on the box, and in that box cover I cut a hole five or six inches in diameter; if the box is large I make more holes. I put a wire cloth screen in that like a cone, with a hole at the top so it comes to a point like a funnel, large enough for the bees to get out. They try to get back but they can't. They will fly out there very fast; none of them will come back again. If I put combs into that box one morning and go back the next morning I would not find a bee in the box whether for comb or extracted honey. I have used no bee-escapes on the hives and I do not have to brush my bees. I like this better

than any other plan I have tried for years. You can have the box as large as you please. You can have it large enough to put half a dozen supers in it at one time; let the supers be comb or extracted honey. I use the brood-comb size for extracted. I put the surplus cases of honey into the box, and you can put in as many as you want. I find this a very good plan.

Mr. France—Are there not some young bees above the queen-excluder that seem to be lost as they go out of that escape? They have to hunt some hive; it would be immaterial whether they went back to their own hive or some other.

Mr. Stone—Sometimes there would be a queen get above. In two cases I found that and the bees won't leave those supers.

Mr. Dadant—It took me a long time to become convinced that the Porter bee-escape was of any value. I shrugged my shoulders at the very first and said, "I don't think they will amount to anything." He finally sent me a dozen escapes and asked me to try them. When you are given things for trial you are compelled to try them. We were given the Bingham knife with a request that we try it. The men set it aside, but I demanded they try it and now they would not have anything else.

Yellow and White Sweet Clover Bloom.

"How much earlier does yellow sweet clover bloom than does white sweet clover?"

Pres. York—How many have yellow sweet clover around where you live, in your neighborhood? (Six.)

Mr. Baldridge—From 3 to 4 weeks.

Mr. Kubick—It blooms only a week before the white in our section—12 miles from here.

Mr. Barkemeier—We have yellow sweet clover four weeks ahead of the white.

Mr. France—Is sweet clover an obnoxious weed in Illinois?

Pres. York—Not in Illinois; there is no law against it.

Mr. Arnd—In this state they cut it down.

Pres. York—I believe that is not in the law.

Mr. France—It was in Wisconsin until I had it removed.

Pres. York—A pretty good kind of a weed, if it is a weed.

Mr. France—In Wisconsin it was on the noxious weed list. I was delegated as a committee to go before the legislature and have sweet clover stricken from the noxious weed list. Among the people who were helping me, I had more farmers who did not have bees than I had bee-keepers backing me. Since then alfalfa growing has come into our state, and we find districts where there is an abundance of sweet clover, and they are coming out there and taking that soil and spreading it to inoculate the land to grow alfalfa.

C. P. Dadant—In a trip which I took to Idaho last fall I was informed by seed men in Twin Falls, and Ogden, Utah, that the cattlemen in the great West, and in most Arizona regions, were buying sweet clover seed to sow in arid lands, because it stood the drouth better than anything else, and would grow in those alkali lands, and they thought it was going to recuperate the land that had been absolutely worthless.

Increasing Sweet Clover Area.

"What can bee-keepers do to help increase the area covered by sweet clover?"

Mr. Stone—Circulation of all the information they can get regarding sweet clover. I have lots of men inquiring where they can buy sweet clover seed, who ten years ago cursed me because I dared to say that any kind of stock would eat it. They have ceased to make fun of us, and are beginning to inquire where they can get the seed. I cut a clipping from the "Successful Farmer," published at Des Moines, Iowa. This man gave the account of two of his neighbors who kept cattle; one had 20 and one had 40 head. The one with the 20 head fed them through the winter on hay; we call that "roughing" cattle through the winter. The other "roughed" his through on the same thing; with the exception of one month he fed them sweet clover straw. The first day of May they both turned them on to pasture—the 20 head on bluegrass; the 40 head went on to sweet clover pasture. The 15th day of August both marketed their cattle on the Chicago market. The bluegrass fed cattle sold for \$4.65 a hundred; the sweet clover fed cattle sold for \$5.65 per hundred. The \$5.65 brought the price of corn

fed cattle. I wrote to this man who raised the 40 head of cattle. To get evidence that we could circulate among our neighbors, who had made fun of us and said that cattle never would eat sweet clover, we asked that man a few questions, and he answered us in a six-page letter. He said that the truth had not all been told in that article. He said that he had sent samples of the sweet clover to Ames, Iowa, for analysis, and it analyzed 22 per cent protein and 5 per cent fat. That is better than alfalfa, because it never bloats the cattle. Chemists say there are properties in sweet clover to allay fermentation in the human stomach, and that was the property that prevented it from bloating cattle. I told this at the Crop Report meeting at the State Fair, and you ought to have seen the furore it created. There were but five or six men of all the people there who rose up and said, "That man is right. Our experience has been exactly the same." All kinds of stock will learn to eat it, and you will find it is better than alfalfa for them, because of the danger of bloating from alfalfa.

Pres. York—Recently there was an "Alfalfa Banquet" given here in Chicago; in the first course was "alfalfa soup." The Bee-Keepers ought to give a "Sweet Clover Banquet," and make all the dishes of sweet clover. (There would be no bloating.)

Mr. Nielson—You must educate the people to know the value of sweet clover, and disabuse the minds that it is an obnoxious weed, and has no good qualities. When I first went down South with bees, there was a great prejudice amongst the people against bees. We had to educate the people to know that bees are not injurious, but of benefit. I did that by and through the local papers. I got the editor to publish items that I would clip from agricultural and various bee-papers, and he published them, and got the community to see the error of their opinions in this regard. And the same thing will apply to the selling of honey. I had to resort to that same means in regard to honey, by publishing statements that they could not refuse to read. We must educate the people who have mistaken ideas with regard to all these things. Each and every one of us, if we can do so, might publish items in the papers with regard to

sweet clover, and, in fact, anything else that will be to our advantage.

Pres. York—We are all to be educators, and do it in our own locality.

Mr. Nielson—If all the bee-keepers would do it, the country would be pretty well covered.

Mr. France—Another thought on this sweet clover proposition: We can not only educate, but we can distribute seed at the same time that we are distributing literature.

Mr. Kubick—If anybody would be caught distributing sweet clover seed in our section of the country I believe he would be lynched. I don't think there is a section where sweet clover grows more abundantly. The Town Board down there got an appropriation of \$15.00 to have it cut, and it has been cut ever since. The cattle there won't touch it at any stage. They seem to go all around it and eat the grass as low as possible, and leave that sweet clover sticking up there as prominent as a tree. There is no farmer around there but what cuts it, but, in spite of all they can do, it is the most persistent grower I have ever seen. I notice that when the cattle do eat it, there is absolutely nothing else left for them to eat.

Mr. Stone—If they get accustomed to eating it, they will eat it from choice.

Mr. Kubick—You can notice it during a drought, when the grass is dry, then they will nibble only the ends of the sweet clover. When I was on the Board they spoke about cutting it. I went to the gentleman who was supposed to cut it and said to him "You leave that alone until it gets through blooming and then cut it," but the damage was done then, the seed had fallen. I was trying to protect the fellows around there who had bees. The fact is that this coming year will be about the biggest sweet clover year we have ever had.

Mr. Stone—It is safe to make a prediction that in 20 years sweet clover will be as much appreciated as alfalfa is. You can now find many men who think that sweet clover is second only to alfalfa. I have a neighbor near me who keeps his hedge trimmed up in a zigzag way, but he comes out with his mowing machine and cuts that sweet clover to make the road look nice. There is no objection to sweet clover so long as it is green; it is only when it dies that it is objectionable and that

"old weed" stands there. I have noticed that when the road gets right bad they go on to this sweet clover and they always have a good road. Put the cattle in amongst the sweet clover and let them learn to eat it; they will get a taste for it.

One spring we had a new horse, and our pasture had got so dry I said to the hired man "Take a wheel barrow and cut that sweet clover and take it down and feed the horses some every night." He said to me the next morning, "Dan won't touch it." It was not more than three days after that ("Dan" was my wife's buggy horse) when "Dan" got to eating sweet clover and eats it from choice as well as any of them now. They had plenty of corn and oats but he couldn't get enough of that sweet clover, and if your stock don't eat it, it is because they don't have a chance to get at it.

Mr. Lyman—I know that my cattle will eat sweet clover in hay that has only a few sprigs of sweet clover in it. In regard to the distribution of seed, we had a man in our town who was a merchant and had a few bees, he didn't sow any seed but he got a lot of it, and whenever a farmer would come in he would toss a little into his wagon box.

Mr. Dadant—In regard to whether stock will learn to eat sweet clover, I can give an experience that dates back to 1874 or 1875. Our land had been originally fenced without regard to lines and we found out that we had about an acre and a half that had been fenced with ours that belonged to a neighbor. We put this strip in sweet clover. My father had found it along the river and had gathered the seed. We kept this in sweet clover till the man fenced his land and claimed the strip. It was very rich, from having been in sweet clover for years. They turned it into a pasture the next spring, the cattle began to eat it as soon as it turned green and killed it out. It never grew there again, it was entirely destroyed. But statements on this are so different that I do not believe the trouble is with the cattle. I think it is in the soil. I think that sweet clover in different localities has a different taste. I believe that soils that have lots of gravel in them give a better taste to sweet clover. We have a little farm along the river on which we had alfalfa, sweet clover and red clover growing. This year the crop

of hay was short; we cut everything early. They brought into the barn hay that had long stems as big as my thumb, of sweet clover, with red clover and alfalfa mixed. I never saw the horses eat anything more greedily than they did that sweet clover. Where the sweet clover now grows, what grew before the sweet clover came? Ragweed—a weed which gives hay fever to our people—and are we going to find fault with sweet clover? Why not raise something that will do good instead of harm, as does the ragweed? I know what the ragweed is because my father had to go north every summer to get away from the blooming of it. Wherever the sweet clover comes up the ragweed disappears. The ragweed didn't do any good; the sweet clover does. I have no sympathy for the man who complains of sweet clover because it does not harm him; it smells sweet and is useful.

Mr. Stone—People hate it only because they are afraid of it, and won't believe you when you tell them it is a good thing. I have a neighbor who cuts the sweet clover out by the roots, and he throws it out in the road to show everybody passing just how he is trying to get rid of that "nasty weed"! The wagons, on one occasion, ran over it and pressed it into the mud and the result was it grew and he had to do his work over. I don't believe there is a difference in sweet clover even where the soil is different; our soil has no sand or gravel in it, and reports are the same everywhere as to sweet clover.

Pres. York—Which is better, to sow the hulled or unhulled clover seed?

Mr. Stone—It is pretty hard to get it hulled. This man from Iowa says: "Because I advocate sweet clover, don't think I have it for sale, for I want to get some more to sow next spring." I gave him the address of a firm in Utah, where he could get it.

Pres. York—Mr. Baldrige, what do you think of the hulled or unhulled seed for sowing? I think you used to prefer the hulled.

Mr. Baldrige—I don't know but what I would. In the vicinity where I live (I live in a dairy country) we bee-keepers complain considerably because the farmers are destroying all the sweet clover by pasturing in the roads. It is against the law to turn

stock in the roads, but they do, and they eat the sweet clover clear down to the ground. Any animal can be taught to eat sweet clover (even the cattle in this man's—Mr. Kubick's—neighborhood); and the horses, if you will cut the sweet clover and sprinkle water over it a little, they will soon learn to eat it; and after they learn how, they crave it, the same as a man does his tobacco!

A Member—Does it have the same effect?

Mr. Baldrige—No, I don't think so.

Mr. Arnd—Very often, when they put away sweet clover as hay, they sprinkle it with salt.

Mr. Dadant—I do believe there is a difference in the taste of sweet clover; whether it is due to the soil, or the atmosphere, or the locality, or something. I will tell you of a little experience I had. I went to California a few years ago. It got into my wife's head that she wanted to visit Luther Burbank. I took the pains to write to him beforehand, and sent him a copy of our Langstroth book, and told him that I had heard he kept bees, and we solicited an invitation. He said he would be glad to see us. So we had the privilege of visiting Luther Burbank, and at Burbank's I saw sweet clover in some states is not accepted expectation of improving it and making it more palatable and acceptable to the cattle. He stated to me that sweet clover was of different qualities, and that in some localities the cattle would not use it. Luther Burbank thinks that a plant of that kind can differ in taste. I believe that sweet clover in some states is not accepted by the stock. It is possible, as Mr. Baldrige says, that they will learn to eat it.

Mr. Stone—About this hulled or unhulled clover seed: I believe that nature has provided for that hull, and it intends for it to be sown with that hull on. I believe red clover should be sown that way. Farmers often sow their red clover in February. Some times it sprouts; there comes a frost, and that kills it. All farmers cover all seeds that they sow nowadays, and at the Experimental Station they say that it ought to be sown deep enough so that the first sunshiny day it will not sprout. If sown with the hulls on, it is more apt to sprout slowly, and be

ready for a stronger growth after the frost has passed.

Pres. York—Can any one say as to the comparative value of sweet clover as a milk-producer when fed to cows? That question was asked me last summer. A dairyman out in Mr. Baldridge's district bought seed to sow for his milch cows. He heard it was better than alfalfa for producing milk.

Mr. Kannenberg—Alfalfa, is that a honey-plant?

Pres. York—Oh, my, yes!

Mr. Kannenberg—It is not considered so by us. We have had alfalfa sown in our neighborhood, and no bee ever went on that.

Mr. Stone—Never did on ours; we had 13 acres of it for 7 years.

Pres. York—It seems to be better in the West.

Mr. Dadant—We must remember that some plants yield honey in one locality and not in another. White clover yields no honey in Switzerland. I was told that positively by Switzerland bee-keepers, and I believe alfalfa does not yield honey in Illinois.

Mr. Stone—Goldenrod does not yield honey in my neighborhood.

Mr. Dadant—And it does in the New England States.

Mr. Huffman—I will ask Mr. Stone if he has ever cut any of this sweet clover when it was 18 inches high, and made it into hay and fed it?

Mr. Stone—No, sir; only green.

Mr. Huffman—With us they do, and it is considered as good as alfalfa. A friend told me in the East, that in the old, worn-out farms they are coming back to sweet clover, and buying it by the hundred bushels, and sowing it on these old farms and bringing them back into a better state of cultivation.

Mr. Stone—I suppose it is known by our members that the Experimental Station has decided that the bacteria that is on the sweet clover root is the same bacteria that alfalfa has to make it thrive; that has got to be a generally known fact, and that alone is going to bring sweet clover to the front.

Mr. Kubick—I have a constituent here—he lives 60 miles away and he says that cattle won't touch it in his neighborhood.

A Member—I must say that this is not because of the over-feeding of the cattle either. In our neighborhood the cattle will not touch sweet clover. Wherever there is a well drained bank,

along a ditch or road, sweet clover grows beautifully, but the cattle won't touch it; they eat all around it. That is just 60 miles southwest of here, and it seems to be well adapted to sweet clover. I never knew of any one trying to use it as a forage-plant. I had a fellow tell me (down in Kansas) that one neighbor had a piece of land which he let grow up to sweet clover, eighty acres, and the neighbors made fun of him. He got \$1,200 from the seed he got off of those acres.

Mr. Stone—It has such a growth that what the cattle eat is not missed.

Mr. Wheeler—That is a point I wanted to make. I have been trying to talk sweet clover for a number of years. I have neighbors and friends besides me who are opposed to it—fighting it. I talk favorably for it and they against it. I say, "Now look at that sweet clover; it is all eaten off." The man on the other side said, "They don't touch it; look at the stalk standing there." But if you watch it closely you will find that a great deal of the plant is eaten—the fine leaves—that is the second year plant; the first year's plant the animals will at all times eat; the second year they eat the leaves some, but not clean. That has been my experience. When the plant is tender, the first year it makes the best kind of hay when it is cut. The next year, of course, it goes to seed; sheep will clean the stalks off entirely.

Mr. Stone—Sheep will eat anything.

Mr. Wheeler—And most horses will, but not that weedy stuff.

Mr. Stone—In regard to the sort of soil that is best adapted to this sweet clover, I think the hard part would be to find the soil on which it would not grow if it had the inoculation that it always seems to have in the roads.

Sec. Dadant—I think you are mistaken. It is found in the Mississippi river bottoms where land is not drained, and it grows so dense you can't walk through it.

Mr. Wheeler—I have been for twenty years trying to sow yellow, sweet clover, and I have spent a lot of money and never saw a sign of it ever come up. For some reason or other, nine times out of ten the clover seed doesn't grow. I bought, a few years ago, quite a little yellow, sweet clover seed and sowed it where white, sweet clover was growing off and on. I sowed quite a few acres of it and have never

seen but one yellow blossom of sweet clover on that ground. The white, sweet clover had been growing there for years, but not very thick. I went out west, in Iowa, twenty years ago, and I took a lot of sweet clover seed with me—a bushel or two. I sowed some of it around on the waste places and it grew in very few of those spots. There was one place where a man had a half acre or so growing. I saw some around his part of the neighborhood.

I mixed some sweet clover and alsike clover, sowed it on the prairie and for some unaccountable reason the sweet clover and the alsike grew up in wild prairie grass nearly two feet tall, and I had the finest growth of clover I ever saw. But wherever I sowed the clover seed by itself I have never seen any signs of it growing.

Mr. Stone—Did you ever sow it in the fall of the year?

Mr. Wheeler—Right after it went to seed. I paid children so much a pound for gathering it, and I got it fresh and sowed it, and it grew very sparingly.

Mr. Kannenberg—Mr. Dadant says it grows in the lowlands, and in the swamps anywhere. We had a road that was not used often, and one year there was sweet clover there. When I drove through there with the horses they could hardly be seen; it was pretty nearly six feet high. A year after that we had an awful flood and that street was flooded from one end to the other; it was just like a creek. The next season there was not a bit of sweet clover shown in that street. It was drowned out. If it will grow in low lands, why would that be drowned out in one season? There would be the seed left. I have sown lots of clover on streets and vacant lots, but I never got any result out of it except that which fell on high ground.

Mr. Stone—There was nothing in that street but seed and it was washed away.

Sec. Dadant—There was never any more sweet clover there at all? The next year it could not grow. You kill off what grows this year and you will not have any next year except the new coming up.

Mr. Stone—It is a biennial. I have said to people, "If you find a plant that seeds this year and has a live root next year, I will give you a dollar for every one you bring to me." It dies the second year.

Mr. Kannenberg—I have a vacant lot

and have stalks in there, some of them thick as an inch and they grow every year, and give as much bloom as ever.

Mr. Baldrige—I have made the same proposition as Mr. Stone. A plant goes to seed, rots and dies after it goes to seed.

Mr. Dadant—Sweet clover is a biennial plant—a two year plant. The first year it grows from seed a foot high. The second year it blooms and then dies. That is a fact.

Mr. Baldrige I have seen sweet clover from three to four feet high the first year's growth. I live in a great sweet clover region all underlaid with limestone. You can plant the seed on any soil anywhere in the United States and it will grow if you have lime to put with the seed, or ashes.

Pres. York—The Secretary has another resolution to read.

The Great Northern Hotel.

Resolved, That the Chicago-Northwestern Bee-Keepers' Association, in convention assembled, do hereby tender their utmost thanks to the Great Northern Hotel for the use of Room L, 38, during Wednesday and Thursday, December 6 and 7, 1911.

HENRY M. ARND,
LOUIS C. DADANT,
GEORGIA N. WESTON,
Committee.

A Member—I move that the resolution be adopted and a copy of same be presented to the Hotel Manager, Mr. Roth.

The motion was seconded, put and carried.

Mr. Dadant—For the first time we miss Mr. W. Z. Hutchinson from our midst. I move that a resolution of sympathy be sent to his widow and published in the paper that he used to publish himself.

The motion was seconded, put and carried.

Resolution on Mr. Hutchinson's Death.

Whereas, Our beloved friend and brother, W. Z. Hutchinson, has been taken from our midst; and

Whereas, The death of this friend and brother bee-keeper has been a serious loss to the bee-keeping fraternity; therefore, be it

Resolved, That the Chicago-Northwestern Bee-Keepers' Association does extend its heartfelt sympathy to Mrs. Hutchinson in her bereavement.

Resolved, That copies of this resolution be sent to her and to the editor of the Bee-Keepers' Review.

Pres. York—Here is a note which has

been handed in, referring to Mr. Bingham, of bee-smoker fame, who is in very poor health. I think the older members will remember Mr. Bingham; he used to attend the meetings of the Northwestern Bee-Keepers' Society. It might be well to pass a resolution to send him, by telegraph, or otherwise.

Mr. Dadant—I move that a resolution of appreciation and good cheer be sent to Mr. Bingham.

Resolution.

Whereas, The Chicago-Northwestern Association has learned of the illness of our honored friend and brother, Mr. T. F. Bingham; therefore, be it

Resolved, That this Association, in convention assembled, do extend their hope of a speedy recovery, and of continued good health in the very near future.

HENRY M. ARND,
GEORGIA N. WESTON,
LOUIS C. DADANT,

Committee.

Mr. Wheeler—I move that we give the Secretary a vote of thanks for his very efficient services the past year.

The motion was seconded, and a unanimous vote of thanks given.

Sec. Dadant—I appreciate the thanks. I have done all I could, although not a great deal. I am willing to do the very best I can in the coming year.

Mr. Duff's Old Queen-Bee.

Pres. York—Mr. Duff is here. We would like to know how old that queen is.

Mr. Duff—That queen died this year. I think she was 6½ or 7 years old. I was surprised. I found a young queen there in June. I thought the old one was still there.

Time of Holding Annual Meeting.

Mr. Dadant—Regarding the time of our next meeting. It would be well to have the opinion of the members as to whether it is advisable to hold it during the Fat Stock Show. It may be that some of our members are attracted by it, or by special rates. For my part, I do not get special rates, and I would much rather meet when the hotels are not so crowded as they are at the present time. If we could meet

a little later, or a little earlier, we could be here when the hotels were less crowded, and, if it makes no difference to bee-keepers, I believe they will save as much on their hotel bill as they, perhaps, save on railroad fare. There are no special rates for the Stock Show.

Mr. France—I had a special rate. (?) A man asked me a dollar and a half to haul me from the Union depot over here yesterday!

Mr. Stone—I applied for the special rates, and they told me they ended the day before, and I was applying on Tuesday.

Pres. York—How many came on account of the Stock Show, who would not have come had it not been for the Stock or Land Show? (No answer!)

Mr. Dittmer—I agree with Mr. Dadant. I think we had better come here for just this purpose. It has been very disagreeable for me to strike town with such a crowd, and have to pay double for it.

Pres. York—Do you want to set the time, or leave it for the Executive Committee? We ought to find out what day would suit the majority the best.

Mr. Arnd—Do you think Chicago is charging extra rates on account of the Stock Show? I think they have regular schedule rates.

Mr. Dittmer—The hotels advertise from \$1.00 up. The first thing they ask, "Are you alone?" They will tell you you can't get a room; or else, it is \$2.00 for a \$1.00 room.

Mr. Dadant—I am very much used to traveling. If we telegraph ahead for our hotel, we get accommodation more readily. This year I forgot to mention it to my son; and we had to pay \$5.00 a day for a room for two.

Mr. Smith—I move you that the time of meeting next year be left with the Executive Committee.

The motion was seconded, put and carried.

A motion to adjourn was then made, seconded and carried.

So, at 4 o'clock p. m., the Convention adjourned *sine die*, to meet again in 1912, at the call of the Executive Committee.



HON. N. E. FRANCE.

REPORT

OF THE

FORTY-SECOND ANNUAL CONVENTION

OF THE

National Bee-Keepers' Association

HELD IN THE COURT HOUSE
MINNEAPOLIS, - MINNESOTA

Wednesday and Thursday, August 30th and 31st, 1911

Rev. J. Kimball, of Duluth, Minn., opened the convention with prayer, at 1:30 p. m., August 30, 1911, as follows:

"Almighty God, our Heavenly Father. Thou art the creator of all things, the giver of all life. Assembled here this afternoon, as an organization of those interested in a common pursuit and in the study of the insect which Thou hast created in all its skill and wisdom—we draw nigh to Thee and turn

our thoughts to Thee as the author of every blessing; Thou who art to us in a measure mysterious, and understandest all mystery—we are privileged to be students concerning the life and the action of this busy insect; in its interests we are here engaged in. We thank Thee for the life and work of that blind bee-keeper who, by the use of his ears and his fingers, was enabled to learn so much of the life of the bee, and we have

received the benefits of his research; and for all others who have followed him, and that we are privileged to use the information which they have obtained, that we may in a practical way use this insect for our good and for the good of those about us; and as we in our pursuit discovered more and more of knowledge concerning the wonders of this insect, our thoughts turn to Thee, the great Creator, who, in Thy infinite wisdom, has employed this manner of bringing to us and mankind that choicest of the sweets, and that which has given to many health, and to more cheer and happiness—so help us as we further seek to know more and more, that we may be led closer to Thee; that we may understand the ways and the mysteries which are opened before us, and so guide us that we may prosper in this business as Thou shalt see it is good for us; and let thy blessing attend us in all the sessions of this convention, and in the work of every one here assembled. We ask it in the name of Christ our great Redeemer. Amen."

Pres. York—There are a few preliminary things that I would like to say. It is not easy to preside over a large convention, and I hope you will help me as much as possible. I am glad indeed to see so many here at the opening session. On the first two tables are samples which are free—except the honey,—and are placed there for distribution. As soon as you all receive the programs which are being distributed, I am going to ask the Secretary to read a letter from the Vice President, W. D. Wright, of Altamont, N. Y., who was unable to come to the convention.

Letter From Vice President Wright.

Altamont, N. Y., Aug. 25, 1911.

Mr. George W. York,
Chicago, Illinois.

Dear Friends and President—Since the announcement of the National Convention at Minneapolis, I had fondly hoped to be present at that time, but find myself handicapped by much inspection work, besides securing the buckwheat honey crop, which is just closing, and needs removal from the bees before robbing commences freely. The convention comes at a bad season for me. Had it occurred later, it would have been more favorable.

I extend greetings to the members, and sincerely hope that the movement started for the betterment of the Association may be carried to a successful climax. There can be no such word as failure for us, and I fully expect to see our body grow in membership, efficiency and power, as the years roll by.

Although the pursuit season, on account of extreme weather conditions, has been disastrous and discouraging to many an apiarist, I trust that our numerical strength may not be affected thereby; and that the bee-keepers of America may increase in faith, wisdom and technical skill to such an extent that an occasional failure of the honey crop may not disturb their equilibrium.

Sincerely yours,

WHEELER D. WRIGHT,

Vice President.

Pres. York—We have received a few letters from other prominent bee-keepers in different parts of the country, regretting their inability to be here.

I think we are ready to begin the first number on the program. You will notice that the program is divided into different sessions—the first is to be devoted to the subject of Foul Brood; the next to Honey Selling; then a Business Session; the next a Miscellaneous Session, and the last, a Co-Operation Session. I suppose the most important of all is the very first, at least it seems to be a subject that is spreading pretty much over all the country.

The Mayor of the city has arrived, so we will have the address of welcome from the Honorable Mayor, Mr. Haynes, of Minneapolis:

Address of Welcome.

It is a pleasure for the Mayor to come here and extend to you a welcome on behalf of this city. We are glad to have you as our guests for a few days; we wish it might be longer. It would be futile for me to undertake to tell you anything about the bee-business. I could give you some of my earlier experiences when I was a farmer's boy in a hay field, but that was not your kind of bees. I have read some about them; I have heard people talk about the bees and the

bee-business, and what it is to conduct an apiary properly, and I claim to know nothing about it except in a casual way.

The interesting fact to me is that you are organized as an association, and in my capacity as the chief executive of this city for some years I have had occasion to observe what organization means, not so much politically as commercially and socially. We live in an era of organization; we live in several eras at the same time, but this is notably an era of co-operation, and co-operation to be effective must be organized, and intelligently organized and administered. It is not simply that we may improve our financial part of the business, although that is an important part—it means much to the community as well as to the individuals who are organized together in their given calling; it gives you a better article, better handled, better treated and delivered to the consumer, so every rational man welcomes organization of this kind, and in the main the great business and fraternal and co-operative organization throughout the country is simply a part of the great scheme of co-operation which by degrees is being passed to make a more wholesome and higher civilization all along the line, so we say, all hail to the organization; all hail to the National Association of Bee-Keepers.

Shall I speak of the ancient origin of your business? It certainly goes back as far as John the Baptist; he got his honey in the wilderness. Those of us who have studied a little into the intricacies of the apiarist and his business have learned just enough to know that no matter how far he gets; no matter how much you discover as an individual; no matter how proficient you may become in the administration of your business, if you are really succeeding you always have the feeling that there is something more to learn, something else to discover, some improvement to be made, and no better place to learn, no better place to acquire knowledge is there, than right here in an association of this kind, and use this knowledge for utilization and profit.

Why, everything I say is organized. Even the mayors are organized, and the chiefs of police, and the engineers are organized,—they who run your city; and the credit man, and the

banker, and the railroads—even Wall Street is organized, and I guess they are, too, as well as anybody.

I suppose our friends from about the country and different parts of the United States who are visiting us, who are honoring us with their presence at this time, may expect me to tell you something about Minneapolis. Do we think Minneapolis is a fine city? Well **we know** it is; if you—any of you—are burdened with the idea that the Minneapolitan is so insensible and modest that he doesn't realize that fact, you want to get rid of that thought; you don't need to tell a Minneapolitan he has a fine city; he likes to hear you say it, but he knows it already, but as I size up the average Minneapolitan—I may say the Twin City man—because I work for both the Twin Cities—the great big metropolis here of over half a million people, and all that goes with it, and for the Mayor of St. Paul—if he is not present I always speak for him—we welcome everybody to St. Paul as well as Minneapolis.

The spirit of the Twin Cities, and I know it is especially true of our own city, and the thing which is moving us, which is putting us to the front, is the fact that we always recognize that there is nothing so well done that it can't be still better done. If we find anything that is done wrong, down it goes and up comes something better; our fellow citizens who planned this magnificent building in which you are as our guests—they planned wisely and well. I don't know of anything that speaks so eloquently, so forcefully, the spirit of Minneapolis as this building. It was planned twenty-seven years ago and finished, the court house part of it, twelve years ago. It was planned at a time when this city was a little more than a hamlet, and a lot of our fellow-citizens said, "This is going to bankrupt the city," and if the city had not continued to grow, it would have; but the men who planned it fought for a big city and said that ultimately it will not be too big. All city business and all county business is done under these walls; and let me say, to the credit of Minneapolis and her people, this splendid building was built for three and one-half million dollars. It could not be duplicated today for seven or eight millions. Labor and material were

cheaper then, and it was well and honestly built; the city of St. Paul and the city of Minneapolis built their magnificent buildings without any graft. Our state capitol cost about \$4,000,000—a magnificent building; anywhere from 500 to 1,000 people go through it every day; it is a work of art; as compared with public buildings throughout the country, it is one of the finest, and if you have not visited that building, I would advise you to "take it in;" it is one of the most beautiful specimens of architecture in this country, inside and out; a guide will show you through and tell you about the building and what the pictures typify, where the stone came from, and the marble.

But do you know what appeals to me more than anything, that during the entire time that these three buildings were erected, and ever since, there never was a suspicion of charge of graft on any of them; that I say is to the glory of the Twin Cities and the State of Minnesota.

Now as to Minneapolis. Their magnificent park system; the great mills turning out fifteen million barrels of flour a year; the splendid banks and banking buildings; the great university here; it is a state institution and located here; a state institution that has on its roll nearly 5,000 students in all its departments; that ranks third in size among all the universities of this country; in some of its departments it ranks first; with the spirit that is back of it, and the money that is back of it, the State University of this State inside of fifteen years will be in the very front rank of all the universities of this country—possibly in ten years. Our forefathers were wise enough to reserve a lot of land, giving a permanent endowment to this university.

I hope the weather will be fair, so that you can see our beautiful residence system of boulevards, and what is being done in the way of improvements. Our lakes—that is the point on which Minneapolis is especially proud; there is where we shine. There is no city in the country—I doubt if there is one in the world—that has such a body or beautiful chain of lakes right within four miles of its city. These lakes are wholly within its border; every one of them under park control, city control, re-

tained for all time for all our citizens, and which will mark Minneapolis as one of the most beautiful cities in this country.

The population, probably, today numbers about 315,000; I can hardly keep track of it. I remember one time when one of our public organizations was getting out some pamphlets showing the advantages of Minneapolis, in a circular scattered through the residence portion, the population on one page was estimated at 290,000; right on the third page from that was another estimate that was estimated at 300,000, in the same document. I was elected, as Mayor of the city, to check that up. I looked it over—there was a difference of 10,000 from the time the circular was set up and the time it went to press!

We have been growing something like that, and we are still growing, because the West and the Northwest, and the East and the South, in all directions, is growing too.

Now, you who have come from some distance, that is the kind of land you are in. Within sixty years the civilization that exists here in this great Northwest has taken place—within sixty years, every bit of it. Now, that speaks volumes. I might talk to you for an hour, and you would not understand it as well as you do now. Today it is the home of happy millions, and more are coming to Minneapolis and St. Paul.

That is the kind of land and city to which I can greet you with all my heart. We are glad to have you with us, and want you to enjoy every minute you are here, and I believe you will. I know that the local committees here will give you a real, hearty handshake and a real welcome.

Pres. York—I am sure I but voice the sentiment of this Association when I say we are glad to be here. Some six years ago I had the pleasure of attending a State Convention here; in fact, I fell in love with Minneapolis at that time, and since I have been a member of the Executive Committee of the Association, I have wanted to have the National Association meet in this city.

The other day I was waiting in an office of a friend of mine in Chicago, and there was an atlas of the world lying on a table. I looked it over, and came across Minneapolis. I said: "I

will read." I found that Minneapolis is noted for its flour and lumber interests; about 80,000 barrels of flour a day they grind out here; and 500 million feet of lumber a year. I said to myself: "We are going to have enough to eat if we go to Minneapolis, and we will have good houses to live in."

Surely Minneapolis is a great city. The Northwest has grown wonderfully, and those who have come from a great distance, we are glad to have with us. We appreciate very much the attendance of the Mayor; we know he is a very busy man to take the time to step in here and tell us about this great city over which he presides. We thank you for coming, Mr. Mayor, and for your address. We hope it will not be so wet here that we cannot get about to see the city!

The Mayor—I wish to state to the Chairman, and to the members of the convention, that we are keeping the city as dry as we can! (Applause.)

Pres. York—I was about to say, when the Mayor came in, that we would take up the first topic on the program, which is that of foul brood. It is not a very tempting subject, but it certainly is a very important one. The first topic is, "The Present Status of the Campaign Against Foul Brood." The Secretary will announce the first speaker.

Sec. Tyrrell—Before making the announcement, I want to say that if there is any man or woman who has come to this convention with a distinct understanding of absorbing everything without contributing, you are very apt to have a surprise in store for you before you are done. None of the speakers have been named on the program. I have been disappointed in not having some of the speakers present who I thought would start the discussions under the different topics. My object in getting up the program in this way was to have every person in the convention in a position where he or she might be called upon to respond to any of the topics under discussion. Perhaps it is not for me to tell you what to do, and what we are expecting you to do. I am quite in the same position that a new salesman in a hardware store got into. One of the backwoods fellows came into the store; the young, energetic clerk wanted to sell him a bicycle. "Uncle John," says he, "there is a bicycle that is just what

you want; you can ride all over your farm and see what is being done."

"How much is it?"

"Thirty dollars."

"I would rather put thirty dollars in a cow."

"Well, now, Uncle John, wouldn't you look funny riding around your farm on a cow?"

"No funnier," says Uncle John, "than I would milking a bicycle."

We hope all will take part in the discussion. I have the pleasure of announcing, as the leader to start the discussion, Dr. Phillips, of Washington, D. C.

The Present Status of the Campaign Against Brood-Diseases.

That the control of the two brood-diseases of bees—American foul brood and European foul brood—constitutes the most vital problem before American bee-keepers is not now questioned by any one conversant with the condition of the industry. As the prevalence of these diseases becomes better known, this becomes even more evident than was previously recognized. But a few years ago diseases were discussed comparatively little in the bee-journals, and only in states where disease had been quite prevalent for a long time was there any legislation providing for apiary inspection. Fortunately, the bee-keepers are more awake to existing conditions today, and the announcement of a new apiary inspection law, or the substitution of a good law for a poor one is a common occurrence. Those not actively interested in such work may fail to realize the radical changes that are rapidly taking place, and even persons who are interested in inspection—legislation and disease-control may be benefited by a discussion of the progress that is being made.

The seeming indifference on this subject was due largely to lack of knowledge concerning the extent of these diseases, for the distribution of the two diseases was formerly entirely a matter of conjecture. European foul brood has been known to exist in New York State since 1897, and occasionally some bee-keeper from another State would write that he feared that he had "black brood." American foul brood was supposed to be particularly prevalent in the West, and was not known

to exist widely in the East, except in a few States where apiary inspection had been instituted. When the Bureau of Entomology began work on brood-diseases, it was realized that it is highly important to know where the diseases are found. As soon as possible, therefore, work was begun to find out the occurrence and prevalence of these troubles. It was not possible to predict that so much disease would be encountered, and I fear that if the extent of the work had been suspected, that we might have hesitated about undertaking so large a piece of work.

A publication (Circular No. 138, "The Occurrence of Bee Diseases in the United States") was issued in May last, giving the data acquired previous to March 1, 1911. In this circular, American foul brood is recorded as present in 294 counties in 37 States, and European foul brood in 165 counties in 23 States. From seemingly reliable reports, American foul brood is given as "suspected" in 150 additional counties, and European foul brood in 63 additional counties. Eliminating duplicates this shows brood-disease as present in 416 counties, and suspected in 175 additional counties. According to these records, disease was known to exist or suspected in all the states and territories except ten—Delaware, District of Columbia, Georgia, Hawaii, Louisiana, Montana, North Carolina, North Dakota, Rhode Island and South Carolina.

Since this publication was prepared, the work has been continued. Up to August 15th American foul brood samples had been received from 64 additional counties, and European foul brood from 46 additional counties, making totals of American foul brood in 358 counties and European foul brood in 211 counties. Two of the States not previously recorded as containing disease have been found to have some American foul brood present, now showing American foul brood present in 39 States and European foul brood in 26 States. The total number of counties in the United States is 2,932, so that disease is known to exist in about 17 per cent. of the counties. It is also doubtful whether we have received samples from half of the counties containing disease. When it is considered that these records are almost solely from the best bee-keeping sections of the

United States, it is evident that conditions are more serious than the percentage indicates. Probably at least 200,000 bee-keepers are so situated that they should speedily learn to recognize and treat these maladies.

The Bureau of Entomology is doing what little it can to help in educating bee-keepers concerning these diseases, by sending bulletins and circulars on the subject to bee-keepers whose names can be obtained in the territory known to contain disease. When the numbers involved are considered this seems like a large undertaking. It is, however, not doing much for the individual bee-keeper. That the sending out of these bulletins results in good is indicated by the letters which we receive from the territory covered, and especially by the large number of requests received from others whose names we did not previously have asking that they, too, be sent the bulletin. When a sample of brood is received from a new locality the inspector of that territory, if there is one, is notified and as soon as possible with our limited facilities the bulletins are sent out.

It may be of interest to indicate how this data is obtained. Circulars are first sent out to all postmasters in the territory to be worked, asking for names of bee-keepers. So far we have covered half of the United States by this method. After the names are received a circular asking concerning the presence of disease is sent to each bee-keeper. Some do not reply, some report no disease, but some send samples for examination, part of which are found to contain infectious disease. A careful card-record arranged by numbers as well as by states and county is kept of all samples received, and maps are also marked to show the presence of each disease. The senders of samples are, of course, promptly notified of the results of the examination. So far we have had about 2,500 samples for examination.

When the first circulars do not bring satisfactory responses, letters are written to some half-dozen bee-keepers in a county asking for reports. This usually brings a definite reply. So far we have not had facilities for carrying the matter farther. It is realized that this method does not give

reliable information concerning the prevalence of disease in a county, but merely indicates its presence. A considerable experience in the field leads us to conclude that diseases are usually much more widely spread than is known even by the best bee-keepers in a county. It should be mentioned that a report of the absence of disease is not to be accepted in most cases, since, unfortunately, even good bee-keepers fail to inform themselves concerning the condition of apiaries near them. Many bee-keepers do not even know the conditions in their own yards.

In preparing the bulletin* which is sent out to bee-keepers in territory containing disease, only carefully tested methods are recommended. So many bee-keepers fail to control European foul brood by the dequeening method that it is not considered safe to recommend it to bee-keepers in general. At the same time, it is often successful and it should not be entirely ignored. To decide just how such matters should be discussed was found to be a rather difficult undertaking. A great many people writing for publication in bee-journals and elsewhere seemingly fail to realize that the average bee-keeper is not a good bee-keeper, and cannot carry out complicated directions. The percentage who can profit by such discussions is seemingly small.

The bee-keepers are perhaps being reached most intimately in the campaign against bee diseases by the inspectors of apiaries. In 1906 the Bureau of Entomology published a compilation of the apiary inspection laws then in force. They were twelve in number. Of these two have been replaced by better laws, and the bee-keepers in the respective States have asked, or are asking, that four others be improved. Two have been removed from the statute books, indicating that only four of the twelve are now considered satisfactory. These are the laws in Idaho, New York, Utah and Wisconsin.

Of these twelve laws, two—those of New York and Texas—placed the apiary inspection under a state office having in charge other lines of in-

spection; California, Colorado, Idaho, Nebraska, Montana, Ohio, Utah and Washington then had the county system of inspection. While some of these county inspection laws are still in force, it seems clear now that the system is not the best, and fortunately four of these laws are no longer in force. Michigan, New York, Texas and Wisconsin had State inspection, and in at least two cases improvements in the laws are desired.

Without going further into the history of inspection legislation, it is gratifying to know that now there are 29 States and Territories having some kind of law or regulations on this subject. During the past winter 14 new laws were being asked for, of which 8 were passed, although Pennsylvania failed to get an appropriation. Sixteen of the laws or regulations now in force place the inspection or supervision under an already existing State or Territorial office. This is an increase of 14 since 1900. Some county inspection laws are still in force, but the lack of harmony existing among the various inspectors in the State is being recognized as well as the general inefficiency of such a system.

For some time past the Bureau of Entomology has recommended the placing of the apiary inspection under the State Entomologist. In 1906, Texas was the only state where the inspection was so organized. In New York the work was and is under the supervision of the Commissioner of Agriculture who has charge of all agricultural inspection. Where there is no general agricultural inspection office, the most satisfactory results have been obtained from work under the State Entomologist or corresponding officials. At present Massachusetts, Rhode Island, Connecticut, New Jersey, Pennsylvania, Ohio, Indiana, Kansas, Texas and Colorado have such a plan or its equivalent. New York, Vermont, Michigan, Tennessee, Missouri and Hawaii place the work subject to the supervision and appointment of some state official other than the governor.

The plan in force in several states of having the inspector or inspectors appointed by the governor as independent officers is good only when by chance good men are chosen, and

*Phillips, E. F., 1911, "The Treatment of Bee-Diseases." Farmers Bulletin 442, United States Department of Agriculture.

even under such circumstances the results are usually open to more or less criticism. When the inspector is independent of all other state work he naturally cannot afford to maintain an office for properly conducting his correspondence, and usually no sort of workable record is kept so that the results and progress of the work may be known. The lack of businesslike supervision of the work brings discredit to the industry and, too, only isolated bee-keepers are helped instead of the formulation of a broad policy for the benefit of all of the bee-keepers of the State.

Often the State Bee-Keepers' Association appoints the inspector. It might seem at first thought that the association is best able to know who should be inspector, but it should be evident that almost any of our small state conventions could be overrun with advocates of an incompetent or office-seeking man at small expense. Furthermore, when the inspector is so chosen he is usually more anxious to look out for the interests of his fellow members than for those of bee-keepers at large. The influence of the State Association has been almost as pernicious as party politics in a number of cases, and for the good of the work it seems to me that our State Associations should withdraw from this line of activity. In one state the association actually prevented the passage of a law for at least four years because they would not give up the appointing power. These things are not pleasant to say, nor should they be true, as they seem to be. When the associations realize that apilary inspection is for the good of all the bee-keepers in the state, and not specifically for association members, I hope we shall see an end of such a policy.

The whole truth is that many good, honest men utterly fail to realize the seriousness of the problem, and have little or no conception of the working out of the details of inspection. Another serious difficulty is that too many bee-keepers look on inspection work as an easy job that can be done when no home work is pressing, and as a means of picking up a few dollars at odd times. This is entirely wrong, and is usually equivalent to misappropriation of State funds. What we seemingly need is a higher

degree of civic honesty in the conduct of some of our inspection work, so that only men trained in inspection methods and well informed concerning diseases will do the work.

Now as to the results of inspection. Having but an inadequate knowledge of the present prevalence of disease, and practically no records as to the efficiency of inspection, it is a difficult task to estimate how much good is being done by this work. Sometimes the task seems a hopeless one, when only a few hundred dollars are appropriated annually and there are thousands of bee-keepers in every one of our good bee-keeping states. However, the results are, as a whole, good. Perhaps it will be well to indicate this by a couple of illustrations.

In 1897, European foul brood broke out in the Mohawk Valley and spread rapidly. Previous to 1899 colonies of bees were destroyed to the value of \$39,383. In 1899 the colonies destroyed because of disease were valued at \$25,420. This does not include the decrease in crop nor does it indicate the discouragement to the bee-keepers. The annual loss of colonies steadily decreased, according to the inspection records of the Commissioner of Agriculture. Better than these figures, however, is a comparison of present and past conditions in that locality. It is reported that there were formerly a comparatively small number of extensive bee-keepers in the valley, and many uninformed and indifferent small holders. The careless and indifferent bee-keepers are out of the business; the careful bee-keepers were instructed in the diagnosis and treatment of European foul brood by the State Inspectors, and from other sources, and today they have little fear of the disease. While there are doubtless less bee-keepers at present than formerly, it is not unlikely that the average annual crop is larger than before the epidemic, and the disease has unquestionably served to make better bee-keepers. With a means of instruction and inspection provided, the disease has been an actual benefit, and I think most of the bee-keepers in the valley today look on it as such.

On the other hand, in connection with our work on the distribution of disease, we often find it difficult to get any data from certain counties. Those who reply, report that crops

are not what they used to be, and that bees are starving; that the wax-moth (or weevil, as they often call it) is destroying the bees; that the spraying of fruit trees while in bloom has killed off most of the bees, or that fumes from smelters or coke-ovens have wiped out the industry. Many of those who do not reply at all probably think the trouble is "bad luck." When a series of such reports are received we usually expect to find that a brood-disease has played havoc among the bees in that region, and we seldom fail in our predictions. Many bee-keepers seem to try to exhaust all the possibilities in accounting for losses before they suspect disease, and probably the majority of bee-keepers in the United States do not even know that bee diseases exist. Where no means or inadequate means of instructing the bee-keepers is provided the result is practically the wiping out of the industry. Such cases exist in plenty all over the United States. To form a perfectly reliable basis for estimating the value of inspection we should, of course, take into consideration the comparative proficiency of the bee-keepers themselves and their familiarity with the literature of bee-keeping, but even without this data it is evident that inspection practically constitutes the difference between recovery from an epidemic and an almost total destruction of the industry. In view of this evident fact there should be no opposition on the part of bee-keepers to inspection, but an earnest effort to make inspection just as efficient as possible. These conclusions should not, however, be accepted as indicating that inspection is all-sufficient. What we should ask ourselves is whether the good results follow quickly enough. Under the best of inspection there is an enormous loss before the education of bee-keepers becomes adequate to control the diseases.

At present the work toward the control of brood-diseases consists practically of the apiary inspection work, and that of the Bureau of Entomology. What we should ask ourselves is not so much how much is being done, as how much, and what else, should be done. Are our efforts sufficient? We must answer this in the negative. Are we doing the best we can? This, too, requires a negative answer. If the

bee-keeping industry is to take its proper place in American agriculture there is a great deal more that is necessary.

A fundamental consideration is that the brood-diseases are not especially difficult for the individual bee-keeper to overcome when he finds out how to do it. This indicates that a general educational campaign is the crying need. From what has been said already it is evident that the efforts now being made are largely educational.

Not long since I had occasion to look up the records for 1909 of the New York inspection. There are four good men on the force. Let us see how much they accomplished. According to the twelfth census (1900) there were 22,738 farms in the state on which bees were kept, with 187,208 colonies. This does not include bee-keepers in towns and cities. The absolute accuracy of these figures is immaterial. American foul brood exists in at least 19, and European foul brood in at least 31, of the 61 counties in the state. There are also 7 counties in which American foul brood is suspected. Taking into consideration the mountainous regions of the state, it is evident that at least three-fourths of the bee-keeping counties contain brood diseases. Not all the apiaries in these counties contain disease, but every one is endangered, and at least 15,000 bee-keepers in the state should at once learn about these diseases if they are not already informed.

In 1909 the four inspectors visited 883 apiaries, or on an average 221 each. When it is remembered that the season is short, and that for European foul brood the inspection is best carried on in the early summer, no more could be expected. They examined on an average of 11,760 colonies each, an average of 53 colonies to the apiary. The average number of colonies per apiary reported in the census was 84, so it is evident that the inspectors are doing the only thing possible, that is, to try to save those deeply interested. At this rate it will take at least ten years to get around once.

In Illinois there are at least 35,000 bee-keepers, or 13,000 more than in New York. American foul brood exists in 32, and European foul brood in 36 of the 102 counties in the state. The

entire force of inspectors put in a little less than 120 days work in 1910, visiting probably not more than 600 apiaries. There are doubtless 20,000 bee-keepers who need help immediately.

These two states are chosen as examples because the systems of inspection differ. In New York the Commissioner of Agriculture has charge of the inspection, which is done by four experienced bee-keepers. In Illinois, in 1910, the Bee-Keepers' Association appointed an inspector who picked his deputies and they were legally not responsible to anyone. A new law providing that the inspector shall be appointed by the governor was recently passed.

I would not have my remarks construed as adverse criticism of the inspectors. The inadequacy of their work is not their fault. We should recognize these conditions, and bee-keepers should never feel when a law is passed providing for inspection that the diseases will not be controlled.

Evidently the present equipment in the fight against disease is entirely inadequate. What are we going to do about it? Of course, where inspection is not yet provided efforts will be made to get it, but are we to stop there?

The forces at work in agricultural education are many, but practically none of them have done anything for the advancement of apiculture. The agricultural colleges and experiment stations, can, and will, help when the subject is adequately presented. The Farmers' Institute ought to be an important factor in bee-keeping education. All of these agencies can be enlisted through the activities of the National and State Bee-Keepers' Associations, but so far practically no association has made any effort along these lines.

Our bee-journals are doing a great deal of good, but we must remember that probably not 5 per cent of the bee-keepers of the country subscribe for them. A much larger percentage read other agricultural papers, and here is a great field largely undeveloped. Practically all of these papers could be induced to publish articles on bees. This association could also be instrumental in having good men appointed to take charge of regular departments, and by these means much

information on disease could be sent out.

But should the associations confine their efforts solely to the enlisting of others to help? Is there nothing for the associations to do? The active Michigan Association sent out several thousand circulars on the subject recently to several thousand bee-keepers all over the state, irrespective of membership in the association. This was a good work, and should serve as an example to other associations. I realize that lack of funds is a serious handicap, but this can be overcome if an effort is made.

The keynote of the present convention seems to be to put the National Bee-Keepers' Association on a business basis so as to help bee-keepers in a practical way. The day of the fraternal bee-keepers' association is rapidly passing. If we are to keep up with the procession, this association must do its share in the fight against disease, and this campaign must be conducted in a business-like and efficient manner. The National Bee-Keepers' Association has a good secretary, and ought to keep him. On his shoulders will come the brunt of the work, but he will be foolish to undertake it unless a large number of the members do their share. This will mean an active interest to replace the passive membership which has been the rule for so long.

A study of conditions indicates a most commendable increase in inspection, showing an increased activity on the part of our bee-keepers' associations, and of individual bee-keepers. The present summary also, I hope, shows that the work has but begun, and that our present efforts are not wholly adequate. Is it not possible for the National Bee-Keepers' Association to set an example to the state and local associations by a greater activity in this all-important problem? The Bureau of Entomology will aid to the utmost of its ability, but even here the Association's help is needed. There should be no decrease in activity, but a constant increase, until we get these diseases under control.

E. F. PHILLIPS.

Bureau of Entomology,
Washington, D. C.

Pres. York—Dr. Phillips has given us a very comprehensive statement

on the status of the campaign against foul brood. It certainly is an important subject, and it might be well to go into it a little further and find out just how the campaign is being carried on in the different states that are represented here in this meeting. I think there are perhaps a dozen different states represented where they have State Inspectors of apiaries, and it would be interesting for us to know with what success the inspectors are meeting, and how rapidly they are getting around. Suppose I call upon a few of the states. Perhaps Massachusetts is about the best organized in this line. Dr Gates, of Massachusetts.

Dr. Gates—I had planned in my remarks, which are to come a little later, to outline our whole system; we have four inspectors "on the road" in the state of Massachusetts, and as we are not able to cover the entire state in one year we are working from the centers; we begin at the center and work out until we come to the limit of the disease apparently on one side, and then work along until we come to the limit on the other side, and in that way we are able to clean up certain areas, and those cleaned last year have this year proven almost entirely free from the disease; the work which was done early in this season has proven very satisfactory at the present time.

We have one feature, probably, which is not found in other States, and which I had intended to speak of later, namely, the quarantine method. Our law reads that upon the discovery of the disease in an apiary a written statement to that effect shall be given to the owner or person in charge; that statement is in the form of a quarantine, and the owner is not allowed to remove any of the bees, or any of the appliances, from the premises until released by a second certificate or written notice. That has often proven very valuable as you may readily see. Sometimes bee-keepers club together and keep a number of colonies of bees on the same premises. Well, if we found the disease on the true owner of these premises and quarantined him, the owners of the other bees might readily remove their colonies to some distant point of the State, and it would be difficult to follow them and they would carry the disease.

The quarantine measure might at first seem to be a little harsh, and I know very frequently bee-keepers say it is a little rough treatment, but it takes only a word or two to explain to them the reason for the action. No man is inclined to thank you to say to him that he has vicious intentions; we explain to him that this is not intended, to be a very serious matter and is not intended to prevent him from selling honey; it is intended for the man who is viciously inclined, who would willingly sell diseased colonies; we explain to him that we are sure he is honest and upright, and would not care to do any such thing and that they will not mind a quarantine; a few words of explanation brings him in the right light, and I must say we would have a great deal more trouble if it were not for this method. As a rule, a man is out of quarantine in a few weeks; we still keep watch of his apiary to see that there is no reappearance of the disease.

Another matter practiced in Massachusetts, which is to me unique, and for which I have been harshly criticised, is the placing of an embargo, so-called, on shipments of bees into the State. Our law reads that colonies transported from States must be certified free from disease; those bees from States where no disease occurs can come through without certificate, but the recipient of such bees must notify the State Inspector that he may be able to examine them.

I have been surprised that out of a large number of shipments coming way from Illinois, and Maine, and New Hampshire, Vermont, Rhode Island, Connecticut and from New York, we have already been able to trace a great many diseased shipments by that method; there is a little bit of history connected with that measure; last winter, two or three of the legislators were inclined to favor our proposition, but they were keen enough to say: "Suppose you do suppress the disease, what is to hinder it coming in from adjacent States?" We had nothing in reply to say but that it might come in, and we knew unless we put in a measure or law to prevent the shipment of diseased bees from Massachusetts, the law to prevent the shipment of dis-

cept that clause. The clause could be re-written to better advantage, and if any other State undertakes that measure I hope it may re-write the clause, but so far it has worked out to our decided advantage.

Pres. York—I think Wisconsin has had inspection work longer, perhaps, than any other State, at least longer continuously, and Mr. France has had charge of that work; we would like to know the condition of things there at the present time, and what progress has been made in stamping out foul breed.

Mr. France—All good things begin in a small way. After we had formulated our bill, when it came to a final consideration we were told that we could not pass that law with any appropriation; we finally squeezed out a little appropriation of \$500, including salary and all expenses for a man for a whole year, and were told, "Now go ahead and do a lot of good." Wisconsin has never been willing to raise that to more than \$200. What can a man do? Only as Dr. Phillips' paper says, "Touch a few spots." Three times I have been to the Governor's office and asked to resign. The best I can do is to try to show a man so that I don't have to go back there. Funds are too limited to be enabled to do a great amount of good. In our State I found a great many Germans were keeping bees who were not familiar with English print. This year I had a part of my annual reports printed in German, and had them distributed.

As to the work that is being done, and has been done, I had to take the responsibility myself. As Dr. Gates has just said, the quarantine method is a good one; it has proven to work well. Only a few days ago a banker in making a deal in the purchase of a piece of real estate and all thereon, included in the purchase some bees; they were a part of his property. On inspection I found every colony infected with American foul brood; I put them in quarantine and stopped the movement of them, but with the little fund that we have, unless our State can do something better, other methods have to be adopted. I think this matter should be handled under the State Entomologist Department in a systematic way. The appropriation that is allowed me in this work is not

what it ought to be, and I am not sure but that proper means can be used by which at our next session of the legislature something may be done. I would say, however, that the beekeepers have in some way become neglectful, in that they are not reporting the disease as they did a few years ago; so far as I can learn, the prevalence of the disease has been reduced in apiaries especially where they are commercially considered; those who have a few colonies of bees standing in the grass and well covered up, they or their neighbors don't know whether they are affected, and here is where much danger lies.

Mr. Wilcox (Wisconsin)—I would like to ask if Mr. France has ever asked the Wisconsin legislature for a larger appropriation than he already gets.

Mr. France—Only in this way: I have asked individual members at times when the legislature was in session, and they have told me I had better keep still or we would lose it all. I have replied I would rather lose it all than to continue the way we are. I have tried to get the University interested. I have gone before the University and offered on the part of the State Association—if the University would permit—to put thereon an experimental apiary, the University to conduct it and issue bulletins that we might get the literature before the people, but they have shaken their heads at that.

Pres. York—Mr Darby, of Missouri, is here. We would like to have him give a brief report.

Mr. Darby—I feel that I have nothing that I can offer that will be of benefit; I came here to be benefited. I realize that something should be done along these lines, and Mr. France has outlined the situation pretty well for our State as well as his own.

The lack of funds for carrying on this work properly is our great need; we have been working hard to try to get more, but the lack of popularity of our industry throughout our State has worked against us. We have not the large number of commercial beekeepers in our State that you have in Minnesota, Wisconsin, and in Michigan and a number of other places. We have a great many small beekeepers owning from one to two,

three, four and five colonies. You can realize at once the difficulty we have in getting a great number of bee-keepers of that class to take the interest in this work that they should. We have had hard work to hold what we have. We were going to make a strong fight before our legislature to get more of an appropriation, to get more help, but unfortunately at the time when we had our plans pretty well matured, our capitol burned, and everything was thrown into consternation, and just at that unfortunate moment some member took advantage of the situation, and offered a Bill to wipe out our whole inspection law, and so our fight then had to resolve on that, and we had hard work to save what we had, and we were content, then, not to make any further effort; so I have alone had to fight this work, and try to enlighten the people as much as I could along this line, and it sometimes seems as if it is a fruitless effort. I sometimes get discouraged, and, like Mr. France, I have felt like giving it up, but I have been urged to continue to work a while longer. I realize that we need to get a better organization throughout the whole country; our States should co-operate; we should co-operate with the Department at Washington, and we should do everything we can to get this work before the bee-keepers, whether or not, should know about this work, so that when anything comes up, and we need help, they can realize at once then that we deserve the help that we are asking for; when they don't know anything about it, you can't expect them to be liberal with you, and I came here to see if I could not learn something whereby I could go home better prepared to renew this campaign against foul brood.

Since talking with Dr. Phillips about his system, I realize that we should co-operate with him, and we should in some way try to get in closer touch with our Congressmen; as he suggested on one occasion, get our Congressmen to send out bulletins; everything of this kind helps; it helps to get the information we want before the attention of the people, and they will then know of this work; and I have found in our State that is one of the greatest needs, to get the people to realize these facts.

To get a man to devote his whole time to this work for a small consideration is a hard problem—a man that is capable; he has to devote a great deal of hard work and a great deal of time, and, as I found during our last year's work, he has to get right down and spend a lot of his own individual money, if he keeps up the work as it should be, and finish up some of the work he has started. I find myself worse off along this line than better, financially, and I realize that something ought to be done.

I feel that I am consuming your time uselessly; I came here to get suggestions, not to offer them.

Près. York—I am sure we would be glad to hear from every State that is represented, but that will take too long, I find. We will now take up the second part of the program, "The Advantage of Apiary Inspection Under the Supervision of the State Entomologist."

Sec. Tyrrell—Unfortunately this is a case of "three times and out." I have made three efforts to get some one to take this subject—the State Entomologist of Ohio, Professor Shaw, and the other, E. R. Root, who I expected would be here, until yesterday. I am going to ask Dr. Phillips to name some State Entomologist, if there is one here, who has State inspection under his charge.

Dr. Phillips—I don't think there is any one present who has charge of the State inspection work.

Sec. Tyrrell—Can you suggest any one?

Dr. Phillips—I believe Dr. Gates expects to say something about that later.

Sec. Tyrrell—Is there any one here from a State where the inspection work is in charge of the State Entomologist? Hold up your hands.

E. A. Dittrich (Indiana)—As far as we know, it has been a great success as far as we have gone.

Sec. Tyrrell—I thought you were going to say it would be if Dr. Phillips had not run away with your inspector!

Mr. Dittrich—We are in awful shape at the present time.

Sec. Tyrrell—Any better under the Department of Entomology?

Mr. Dittrich—It shows up better; greatly improved over the former way.

Mr. Dittrich — Nothing; under no department at all, until we got the State Department.

Pres. York—How about Ohio? Mr. Muth is here.

Sec. Tyrrell—How is it in your State, Mr. Muth?

Mr. Muth—Fine.

Sec. Tyrrell—Better than the other plan?

Mr. Muth—Yes, sir. We have an official inspector; Mr. Shaw is doing his work; he is an inspector that knows his business, and he is cleaning it up. It works well; that is all.

Sec. Tyrrell—That is due to the inspector; would not the inspector do just as well if under some other department? and why does the Department of Entomology make it better? In what way is it better?

Mr. Muth—Well, to illustrate. The inspector visited a farmer who had some fifty colonies of bees, all infected; he received notice from Columbus that they must be cleaned up inside of ten days, and he cleaned up. It works fine in Ohio.

Sec. Tyrrell—Dr. Phillips, why is it better?

Dr. Phillips—I tried to point that out in my paper. Because there is system in the work; it is conducted in a businesslike manner instead of hopping from place to place. It is done systematically; the territory is covered more thoroughly, and better work is done.

Mr. Darby—Could not an individual inspector accomplish the same results?

Dr. Phillips—I don't think that you are very likely to get it done; I think you are very apt to lack sufficient funds for the maintenance of an independent office; you are not allowed a great amount, but used in connection with an office already existing you can accomplish better results; furthermore, a man who has charge of other lines knows how inspection work has to be conducted. Every bee-keeper, however well he may be informed concerning diseases, is not informed with reference to the maintenance of an office or regarding the conducting of inspection work; it takes him some time to find out how the territory should be covered.

Pres. York—"How can a national campaign be conducted against foul

brood?" We will proceed to the 3d subject for discussion.

Sec. Tyrrell—That is really a problem, and I assigned it to as good a man as I could think of, who, unfortunately, cannot be here—Wm. A. Selser, of Philadelphia, and he has sent the following paper:

The National Government and Its Relation to Foul Brood.

It has been the writer's privilege to visit the Bureau of Agriculture at Washington, D. C., a number of times the past season, and come in consultation with Dr. Phillips, Dr. White, and others in the department, and I have been astonished at the amount of good the bureau has already been to the bee-keepers, throughout the United States. Specific data from nearly every state in the union has been compiled and tabulated, and will be of immense value in the future. The New Jersey Legislature has just passed a foul brood law, and the national bureau has made up a list of questions, which the committee of the New Jersey state association felt could not be excelled to be used by the Civil Service Examiners in securing a foul brood inspector.

The bulletin on foul brood, recently issued, should be in the hands of every bee-keeper in the land, and is worth thousands of dollars in the detecting and treating all bee diseases.

Samples of suspected trouble have been sent from every eastern state, and the information has been invaluable to the sender. But, with the increased appropriation the bureau has obtained this year, the future is even more promising than the past.

The writer was in conference with Mr. Wilson, Secretary of Agriculture, and an inspector is to be put in the field this year with increased facilities under Dr. Phillips' direction, who will go to any part of the United States, and make a special study of the spread of the disease. This study to ascertain just how it is scattered over a given section; its scientific development; what countries have to fear it; how to act regarding it; with special directions which may be applicable to those local conditions, which will be of untold value. Secretary Wilson said, "I will give Dr. Phillips' bureau all the help he needs, and any

assistance he requires to pursue his investigations for the help of the bee-keepers."

Let us here at this session pass a resolution of thanks to Secretary Wilson, and through him to the bureau of agriculture for the valuable assistance they have rendered the bee-keepers of the United States, and thanks for the promise of much-needed help in the future.

The state of Pennsylvania has also passed a foul brood law, and our law makers are beginning to see the immense importance of our industry. "Every cloud has a silver lining," and the very good fact of our needs of foul brood legislation has in a wonderful way advertised our industry and helped create an interest in honey production.

The Senate and House of Representatives in their agricultural committees were astonished to know there was so much honey produced in the states, and that the honey production in the United States was so important.

Respectfully submitted,

WM. A. SELSER.

Sec. Tyrrell—I suppose you all understand that the appropriation has been increased from ten thousand to fifteen thousand dollars, and that was due largely to the efforts of Mr. Selser, I understand. Let us see, what was the number of bee-keepers in the United States, Dr. Phillips?

Dr. Phillips—The last census, 797,281.

Sec. Tyrrell—In round numbers 800,000. Let us remember that there are 800,000 keeping bees in the United States. When some little fellow pops up and says the bee-industry doesn't amount to anything let us hit him with that 800,000!

Mr. York—I don't suppose there are many here who know just how the national campaign could be conducted against foul brood; perhaps Dr. Phillips can give us a little idea of how well this could be followed.

Dr. Phillips—I think I have said about all I have to say.

Pres. York—Has any one any question to ask?

C. P. Dadant—I would like to suggest the possibility of a national campaign—a federal law concerning foul brood. I know that a great many people are in favor of state laws, but there are a great many points on which state laws are worse than foolish. We

have states not divided by natural barriers of any kind, where you can step from one state to the other without stepping over anything but soil, and those states differ on, for instance, marriage laws. A young lady can't get married before she is eighteen years of age without her parents' consent, in one state, but she can step over the line and go into another state and get married before that age. Illinois and Iowa have different laws concerning weights. There are a great many instances like that. We ought to be regulated by federal power; the examination and inspection of bees ought to be regulated by federal power; one state makes laws preventing the importation of foul brood into the state; another has no such laws and accepts bees in that condition, and the disease is spread just the same. We had in Illinois, last winter, a good experience of what the states will and will not do. We fought for four months in the legislature to get a law, which we finally did get. We had been told by Wisconsin and Indiana that we were furnishing foul brood along their lines; we will always have some state furnishing foul brood to other states, and until we have a uniform law making the transportation of foul brood a crime, and also a law that will enforce the destruction of it throughout the United States, we will have trouble.

Is it possible for us to get a federal law? Whenever we do that we will have good straight action; until then we will be curing it in one place and let it occur in another. Listen to the Wisconsin man—gets an appropriation of only \$700. And the Missouri man thought he was not going to get it this year. We should have a law that will cover the country, and give us money enough to do what is necessary, and we can have that law. We proved in Illinois this year what could be done. We wrote some 800 letters, and in spite of the fact that bee-keepers said we were working for the benefit of the supply dealers, we finally got the bee-keepers to work on the legislature, and in spite of the opposition of a great many leading politicians, we got our laws through. We can do the same thing, I am satisfied, in a federal way; get laws enacted by the United States, like the pure food law, and exterminate foul

brood through the states; until we do that, we will not be successful.

L. D. Leonard (Minnesota)—We went through last year here in St. Paul with the same methods; the same question we handled of passing a foul brood law. We have had a law here for several years; it was not effective because the inspector did not have the power to destroy under our old law—destroy the bees—so we went to the legislature last winter and got our present law passed, and we had a monkey-and-a-parrot time. We just got that law passed the evening session of the last day of the legislature; and then, if it had not been for some very good friends we had, who took the pains to have it brought up, we could not have gotten this law that is now effective. We now have a model law in Minnesota. And I think that as far as the inspection goes we have the power to stamp out foul brood as much as an inspector can do it. But here comes this question of the bee-keeper who stands in the way, his lack of knowledge of what to do, and his inertia in the matter stands in the way of effective work by the inspector or his deputy; the only thing I believe—the only thing that will ever stamp out foul brood, will be sufficient education for the rank and file of bee-keepers, brought to their doors; not that they shall come here to Minneapolis and get it especially, but that it shall be sent out through the states by the universities of the state, through their extension work, right to the very doors of the people, right to the county or the town, send it as coming from the state agricultural college so that they will feel that somebody is trying to do them some good instead of, as half the time now, thinking the inspector is trying to do them some harm. Having these two offices separate—one the teacher and the other the inspector—coming as a man like that would—an educator from the agricultural college—everybody knows that he is there to help them; that he has not come to destroy but to inspect the bees; that he only goes there to tell them about the bees, and the diseases of bees, and give him every suggestion he can to help them. We have a good law in this state, and we have it fixed so that the inspector can appoint deputies, and I think that as far as that office

is concerned it will be conducted in a very efficient manner.

Now I hope that in the very near future our University will take on this work, which I believe is the only way that the business of bee-keeping will be conserved. The instructors, or the heads of departments, or the regents of the university, know hardly anything about the importance of the industry of bee-keeping. We have to inform the regents, and the powers that be, in the universities, about this industry, so that they will realize that there is something in it; if we can't impress the powers that be, in the universities, how will they know what to do about making chairs or appointing teachers to carry on this work; it has to come from us; we have to push, and push, and inform them and give them to understand, and make them know the importance of the industry of bee-keeping, just the same as they know the importance of poultry and cattle raising, or growing grain, or anything else; then we can get that office established in the university and by this method we are going to establish a bee-keeping industry of the very highest character and efficiency. I believe that that is the only way that it can be done.

Mr. Dittrich—Mr. Dadant has spoken my feeling about a national foul brood law. I think it would be the only way that we can end the disease. We have a pure food law; first we had a state pure food law, and after that we had a national law, and it was a success. The state law fell through. I believe we should all work to that end.

Sec. Tyrrell—How are we going at it, to get it?

Mr. Wilcox—I want to say that it occurs to me a national pure food law could not be constitutionally enacted, or have any force except under the interstate commerce law, only so far as to prevent it crossing state lines, the bee industries of the country could not be reached except through state authorities.

Pres. York—I was going to suggest that about the national pure food law which applies only to food that is shipped from state to state.

Mr. Dadant—I will agree that at the present time you cannot do anything without going through your interstate commission, but that is not right; we want to change our laws. I say that

we must work towards federal laws in a great many instances, not going through interstate commissions, but have direct laws. The trouble is we look too much at state rights; the states have a right to make laws, and the general government does nothing. What I want to bring to your notice is the necessity of having federal laws on certain subjects; it is the thing to have. You say we can't do it. Well, I think we can make a revolution in our conditions; change the situation; it will take more than the bee-keepers to do it, but I want to impress upon you the necessity of it; and until we do that we are going to flounder in the small things. If we could get every state to have an apiary department with an apiarist in charge, why, we could carry things along very well; but how long will it be before we can do that? Governor Deneen, of Illinois, suggested to us that we ought to have in Illinois, a state apiary. Well, we have one, but I would be ashamed to tell you what shape it is in; and that is one reason why we don't care about putting the state entomologist in charge. He is a very nice man, but not a bee-keeper; to put the state entomologist at the head of bee-keeping inspection—you might as well put a bee-keeper to examine a silk worm in the silk industry, because he would not know when the bees were robbing, or when they were storing honey; he could not tell me what to do to destroy the disease. Of course, if you have a practical bee-keeper employed, then it is all right. There are a great many people who don't know when bees are robbing, and you know that they should not rob when you are handling foul brood.

W. E. Krause (Wisconsin)—I think we need more bee-inspectors, but the state doesn't want to allow more money for inspectors. I think the fault lies with the small bee-keepers; I think every bee-keeper should have a license, and know something about keeping bees, and about the bee. Doctors have licenses; barbers have licenses—now why should not bee-keepers have licenses? I know a case where a man cleaned out his yard of foul brood, and some neighbor got in a lot of bees, thirty or forty colonies, and neglected them, and the first thing he knew there was foul brood there, and it got into the neighbor's apiary;

that man didn't know they were there; he thought his bees were all right, but the first thing he knew they pretty nearly all died off, and he didn't know what the trouble was; all he knew was that they were dying; but you look in there and you detect foul brood, and he did not know enough about bees to know what the trouble was; and I think we are hurting one another in that way. A good bee-keeper will understand the disease and try to control it. If bee-keepers were licensed, that license fee could be used for the association, and I think as long as the state won't give us any more money than it does, a man should be qualified to keep bees and especially to sell honey. If a man has a swarm of bees in a tree and wants to hive them, he should not be allowed to sell honey unless he could pass an examination and be qualified to keep bees.

Foul brood is making headway while we are talking about laws; every man who has a license should have the power to go into a neighboring beeyard and inspect bees. My neighbor may have foul brood, but I have no right to go in there; but if I had a license that would give me power to inspect any man's bees I wanted to, and I could report what I found to headquarters, I think that would go a long ways towards getting rid of the disease.

Pres. York—We would like to hear from Mr. Woods, Dean of the Minnesota Agricultural College.

Mr. Woods—I would like to add one word. We have a law in our statute Bureau of Animal Industry to control the spread of disease in the industry of livestock; bees are not included under the head of livestock, so that law does not apply to the diseases of bees, but the law has been tested, and while it is not constitutional for the United States to include bees under this head, it is constitutional to go into a State and take control of any epidemic that is likely to spread disease. The National Bureau of Animal Industry has been enabled, under that law, to prevent the spread of contagious diseases of livestock.

We should have a similar law to enable the Bureau of Entomology to quarantine one State against another in cases of diseased bees, that are likely to be carried by the natural movement of the bee from one State

to another. Such a law, practically worded, the same as the National Bureau of Animal Industry, would enable the Bureau of Entomology, in cooperation with the State authorities, to quarantine one State against another. The mere fact of the existence of that power would spur the State authorities to keep the disease out of their State, and enact a more effective law, for just the moment you touch upon the commercial movement of honey which would be quarantined in cases of the existence of the disease, that minute you begin to get commercial men to pay attention, and ask for an appropriation which is adequate to enable the State authorities to work properly.

Sec. Tyrrell—How will we go at it to do that?

Mr. Woods—Have the next committee of your National Association ask Congress to enact a law based upon the workings of the Bureau of Animal Industry, authorizing the Bureau of Agriculture to carry on this work; a very simple thing; all you need to do is to have some of your most influential representatives of Congress introduce that law, and I don't think there would be any trouble about passing it.

The Bureau of Entomology don't want that; Dr. Phillips says, "Don't say what you have to say; we have all that we can do." The fact is, if they need more money they can get it, and if this National Association backs them up, and asks for a law of this kind, the Congressmen will realize that really the bee amounts to something, and they must pay attention to the bee-industry.

Pres. York—I don't think Dr. Phillips looks overworked at all; and if he can have more money, he can hire help to assist him in the work.

N. H. Emons (Minnesota)—I would like to add a few remarks to the discussion. Are we going to discuss the foul brood question further this afternoon? If not, I would like to ask a question or two, and think it would aid us in our desire to bring about results. First, what would a healthy colony of bees produce? Second, what are the results of a diseased colony?

Now, then, we are interested, all of us, in the best possible results—we who are bee-keepers. After we have these two facts set before us, it is natural to inquire what is the cause of

foul brood? I don't know, and I got up to ask this question, hoping that some brother bee-keeper would inform me. What is the secret of it? After I know the secret of it I am still in darkness—and why? Because I don't know what to do to stamp it out. Now, then, if we can have those facts set before us—first, what a healthy colony of bees will do for us; and then what a diseased colony will do; and third, what is the cost of it; and fourth, how can we get rid of it? And if we can educate ourselves about those facts, and we have stimulated such a desire to get rid of it that we will go to work in earnest, will it not help us in these issues?

Pres. York—Those questions will come up later under topics outlined on the program; and also under the question box. We want to keep everything separate; then afterward a miscellaneous lot of questions can come up. Let us stick to the topics the Secretary has outlined, and then later bring up anything else we desire.

Pres. York—"How to get State Foul Brood laws" is the next subject.

Sec. Tyrrell—Illinois, as we all know, has been having a great time to get Foul Brood laws; they had the Legislature to fight, and some bee-keepers as well. I was in hopes that Mr. Stone, the Secretary of the Illinois State Association, would be here. I believe we have as good a man in Mr. Dadant; I think he has been in the fight. I would like to know how they got that law.

C. P. Dadant (Illinois)—I am President of the Illinois State Bee-Keepers' Association. I think I said a little while ago that we sent out 800 letters to bee-keepers, urging them to help us in the passing of a Foul Brood law. We had them write to their Representatives and Senators, urging them to vote for such a law. When we went before the Legislature, we learned that there was hardly a man who knew anything about bees.

Pres. York—How many finally responded?

Mr. Dadant—All responded; only one voted against the law. We never knew how many responded to the letters; we knew of many people who had written about it, because the Representatives said so. I think the bee-keepers who have foul brood, and who know that we need help, are not the ones to be

feared; it is those who don't know they have foul brood, and who don't care. I want to tell you of an instance not very far from us. We told a man to look out for foul brood; four years ago he had 75 colonies of bees; he was one of those easy-going men; he had a good crop of honey, a good flow. Last year we were told he had foul brood. He said, "Oh, no, that is a mistake," and this past year I was told he lost most of his bees; then he acknowledged he had had it, but had not bothered with it. Last spring we bought him out; he had three out of 75 colonies left. That gives you an idea of how the careless man can do the harm; he is the one who suppresses the fact of his bees having the disease.

In endeavoring to get our law passed, we got the bee-keepers to write to the Legislators, as I have said, but there was one mistake we made, in not having the bill drafted by a good lawyer; the one we had passed is not the one we want; it was drawn incorrectly in the first place; and we will know better how to go about it next time. Bear in mind, the trouble is always in getting the cash; when it comes to an appropriation, that is where you stumble.

If we could get an Apiary Department (and, as I said a little while ago, Governor Deneen suggested to us we ought to have a State Apiary Department), they will feel in duty bound to support it. We may get money enough to fight the disease in the State, but my argument in favor of Federal law is simply that it gives the States an opportunity to work together. When you speak about Wisconsin or Indiana having laws, what do they care about Wisconsin? They do not care for the neighboring States. They will work for the people when they see that they have to.

Sec. Tyrrell—Did you have representatives of the bee-keepers working in the Legislature?

Mr. Dadant—We had eight or ten bee-keepers every time working around the Legislature; we had six or eight every time they called us.

Now, I am very glad to hear from the gentleman who has spoken in regard to the possibility of getting a law without changing the Constitution of the United States; the Constitution of the United States ought to be changed

so that our weights and measures and marriage laws would be universal; a great many things that we need throughout the United States will not be done by the States, but by the general government.

Hamlin V. Poore (Minnesota)—After we found the law in this State (Minnesota) was inefficient, the Minnesota Bee-Keepers' Association passed resolutions recommending a more effective law; a number of us got together and drafted a law as nearly as possible embodying all the best features of the different bee-inspection laws of the different States that we could see would best apply to this State. We found about the appropriation, there was a fear that the bee-keepers of Minnesota would have too large an appropriation, or, in other words, if they asked for too large an appropriation, we would get nothing. I am sorry now that we did not apply for \$5,000 instead of \$2,000.

After working to get this law, I approached members of the House and Senate; I approached the committee to show them the importance of the bee-industry to the State of Minnesota. Owing to our climate, the season being so short, were it not for the bees of this State, we would have but very little fruit, because, during the period of the apple-bloom and other fruit-bloom, there are very few other insects in this State that visit the flowers to pollinize the blossoms. The fruit industry of this country depends almost entirely upon the bees. There are thousands and thousands of tons of nectar that goes to waste in this State every year for want of bees to gather it and the children of the country are craving sweets, and they are furnished with sweets of unquestionable healthfulness. I asked them if the industry of this State in which there are millions and millions of dollars invested was not worth as much to this State as the jack-knives that the legislature thought necessary they should have!

The bee-keepers must be more in earnest in regard to getting an appropriation. \$10,000 today for the Minnesota Bee-Keepers' Association would be a mere drop in the bucket compared with the waste of money upon useless things in the way of jack-knives, spittoons, and other

things. We must protest against those things, and through these organizations we can do it.

I am surprised at the lack of realization on the part of the average citizen of Minnesota of the importance of the bee industry. They have talked about conservation; there is no industry in this State upon which the application of conservation would show better results than the conservation of the bee-industry of Minnesota, and what it means. I am speaking now of what I know.

If we make an advance in the bee-industry we must do it through education. When I find a man who is keeping bees for over 60 years,—over 80 years of age,—who was one of the most advanced bee-keepers of the State so far as keeping up with modern improvements who will say to me as he did, "I have kept bees for 60 years and have yet lots to learn," how can we expect to advance in the industry without education along these lines?

I found one man, two weeks ago, with 54 colonies of bees; his bees were hanging out,—loafing—because there was no room in the hives to store honey when it came in, and he said he had a long knife that he showed me,—the regular Cuban machete—which he used to open his hives and lift out his frames!

How can you advance the bee industry without education? I would like to live long enough to know what that man doesn't know about bees, and he thinks he knows it all!

One man is producing in this State over \$2,000 worth of honey this year, and there are 20,000 places in this State where the same thing can be done, with some intelligence applied to it. Why should we hesitate to frame the right law, and demand an appropriation to carry out that law even if it exceeds \$10,000? We can get it if we show by comparison the necessity of the bee industry and the foolishness of furnishing thousands of dollars for jack-knives.

As we have located foul brood in this State, the most of the foul brood that I can find has been carried from the honey bees shipped in from other States. The largest amount of foul brood around these States is attributed to bees being carried

from other States. It requires the most close application of each individual to stamp it out. Your surgeon will sterilize everything he uses in an operation. How can we combat such disease unless we educate ourselves to understand what it is, and how to get at it to stamp it out?

Out of 20,000 bee-keepers in this State we have not over two dozen who are really up-to-date bee-keepers. What do we need? Education! I can show you apiaries in this State where men have nice, modern hives, and if there is any hive that needs a sledge hammer and dynamite to get the honey out of it, it is those hives.

The people must be educated and learn how to properly care for bees.

I have tried to learn all I could about bees, but when I look at the situation as I know it to be, I feel I have not yet learned the A, B, C about the bee industry. The same process followed one year will not hold good for another year, owing to the condition of the honey-flow or otherwise, early or lateness of the season, etc. Let us get in shape to teach the bee industry; make this industry what it should be,—one of the great financial benefits of the State; and, for the individual, I know of no industry, for the time expended, that will bring greater results. This man who is getting \$2,000 worth of honey this year,—I don't suppose he has spent three months' time, all told; he has an immense enthusiasm, and knows how to get the honey.

Learn the bee business and follow it out intelligently in this State, with a proper number of colonies, and you can make an independent living with but three or four months' direct application of your time. This State has the reputation of being a great fruit State, but the crop is going to be small unless we do something towards getting more bees.

I did not intend to talk so long, but when a bee-keeper gets warmed up he gets warmed up clear through.

Sec. Tyrrell—Let us nail down one suggestion in going after our State foul brood laws, and after our legislators, is it not an important point to remember to go at them from the standpoint of the value of the bee industry to the fruit-growers and other interests—it is not a selfish

thing,—instead of saying so much about the benefits to you as a bee-keeper?

E. L. Hoffman (Minnesota)—I want to state my experience in lending what little help I could to get our last last winter. The trouble in going before the legislature is that they look upon the bee-keeping as a mere pastime, and in voting an appropriation, to help it along, they are afraid they will injure themselves with some of the politicians. So I went before one of our legislators, and when I saw how he looked upon the matter, I asked him if he would give me a little of his time that I might go into the subject with him and explain to him what the bee-keeping industry really is. I said to him: "I am managing five apiaries; the parties, where I keep my bees, share in the crop; I have a record of every pound of honey I got and to whom I sold it." I showed him that it was not a mere pastime, and he could see by my footings what I had done, and he had questions to ask afterwards that showed me he was getting interested, and I know, from what I afterwards heard, that he worked for the bill by getting others to work for it. I also told him, in my way, what the damage would be if foul brood would break out in my yards. I think by showing him that it was not a pastime that I got more votes, and I believe that this can always be done.

Pres. York—The legislators are mostly from Missouri,—they "have to be shown"!

Mr. Darby—We have had quite a time, a little while ago, and I would like to know some better way of getting before these legislators. Now we thought we had things pretty well lined up. We thought the horticultural interests were going to help us out, and we had a number of friends outside the bee industry,—in the fruit industry,—who had promised to help, but when the time came there were so many appropriations being asked for that the first thing we knew we were alone; the Board of Horticulture was asking for an appropriation; the Board of Agriculture was asking for larger appropriations, and they wanted their appropriations, and wanted them bad, and the result was

they simply left us to do our own work, and they did theirs.

Now how can we get these things brought up before the people so as to get the help we should? This is what I want to know.

Our Agricultural College has a number of men who are liberal minded, and they promised me they would help all they could, but when the time came they got busy in working for an appropriation, and we had to shoulder our own wants ourselves.

A lack of funds has been a stumbling block with us in getting our bee-industry represented as we want it to be. It seems to me we should have some influence from the powers up, to help us on occasions like that. I feel that some influence from Washington, from our National Association, and the like, if properly brought about, could be of great advantage in times like that.

We all know what great good has been accomplished by Dr. Howard, of Washington; why can't we get some one, from some means or other, to spread apiarian information so that the influence it will have throughout the country will be felt on occasions like this?

Pres. York—We will have a short intermission now, so that you may move around—change your positions—and thus rest yourselves.

Prof. Washburne—that seems to be the difficulty in giving a course of instruction to the ordinary college students; they come to us in September and leave us in June, therefore we don't have the opportunity we would like. I would like to hear what Dean Woods has to say along this line.

Mr. Woods—I order the Entomologist to proceed, I being "the boss" of the institution!

Prof. Washburne—I want to assure you that the Agricultural College are in thorough sympathy with this meeting, and will do what they can; I know that Dean Woods would be glad to co-operate along any line which would help to bring bee-information before the State; however, he is over a board of regents; they have to be convinced of the necessity of things before they will do anything. Of course, it takes money to do this work. I am quite certain the time is coming when Minnesota will be helped in this way by having a representative in the Ag-

ricultural College to do extension work, perhaps to give instructions to help along this line, and learn how to wipe out foul brood, through education.

I want to say further, along the line of the subject previously discussed, as to instruction being under the State Entomologist. I have the good fortune to be one of the Entomologists in Minnesota. He has a number of duties to perform, and would not care to take upon his shoulders any further work; at the same time, you may remember the story of where the cook sharpens his knife, and asks the ducks how they would like to be killed, and they said they didn't want to be killed. That is not the question, how would you like to be killed? we must remember we are here to observe the laws of the State, and if the laws are created, you will find us willing servants to do what we can.

Supposing the State Entomologist were connected with the Agricultural Department, it would add stability to the work, and would above all things remove it from politics. It seems to me that where you find political taint in an appointment you are apt to find inefficiency, and for that reason, looking at the reverse side of the shield, and putting aside personal ambition, I think it would be a good thing to have the State Entomologist a practical bee-man, and be provided with funds to have in his department practical beemen, to have deputy inspectors, and go over the State.

I insist, and very politely, that Dean Woods say a few words along this line.

Pres. York—It is unfortunate we have not the board of regents here, that they might command Dean Woods to speak!

Mr. Woods—Mr. York, I came here to get all the information I could about bee-culture, and especially from the standpoint of the work that should be done in the Agricultural College, and the Experimental Station, and Extension Department, and also about the question of inspection. Since our beemen have been approached on all these points, I have been giving the matter a great deal of thought, but certain policies were involved before we make recommendations to them.

In our State the plan has been to educational work; the college station is not charged with the enforcement of the law. We furnish scientific in-

formation and assistance to the State officers; we are co-operative with the State Live Stock Commission, the Sanitary Board, and with the State Food Commission.

The question whether this should be put under the State Entomologist, or under the Experimental Station, is one which I am perfectly willing to have settled in a manner that seems best. I think the way that has been suggested is perhaps the best one, for us to have in the experimental station a specialist on bees, who would give the lectures and do the extension work in the State, and who would co-operate with the State Dairy and Food Department, or the State Entomologist. Whether there should be any real legal connection between these two afterwards, I am not prepared to say. I understand there is in the State of Massachusetts, and if they found it to work well, perhaps it is the best thing for us to do, and I am willing to back it.

We have courses in bee-culture, and they are taken up by quite a number: the unfortunate situation is, in our school of agriculture, the students are with us in the winter months, and they go home as early in the spring as possible, and do not return until the fall crops are gathered, so they are with us during a period when we cannot give them practical work in apiculture, but it is possible to get around that perhaps in some way. Suggestions have been made here which I am sure Prof. Washburne and I will approve of, and it may enable us to put courses in that will be useful. I think the best thing we can do is along the line of extension; put a man in our Extension Division who will go out and visit the farms; get in touch with those who are cultivating the bee-industry, and put them in touch with others who can help them and give them the information they want, and do this by personal visit.

The institute work is good, but it is lectural; the extension work conducted through bulletins is good, but only ten per cent read the bulletins; the other ten per cent use the bulletins for other purposes. We have found that our most profitable work comes from a man who can go to the farm and show how the thing is to be done, what the need is, and then hand out a bulletin; and if you have created

the interest, they will read the bulletin and make the proper use of it, so that more than half of our work is getting in personal touch with the farmer. My idea would be that this bee-man should get in personal touch with the men who are cultivating bees, and learn all he can, and give all the help he can.

I want to assure you that we are interested in this work, and we are going to do all we can to back you up and make bee-culture an important feature in institutional work; and I want to say to the National Bee-keepers' Association, if there is anything we can do to help along in getting National laws, we will be glad to do that.

Pres. York—I am sure the bee-keepers of Minnesota, as well as elsewhere, will appreciate the interest taken by the Agricultural Department of the State of Minnesota, and what it hopes to do hereafter.

Curing Foul Brood.

Pres. York—The next subject for discussion is, "Curing Foul Brood; Inspector's Methods; What Are They"?

Sec. Tyrrell—That is a topic that every one ought to be alive to. The inspector's methods of curing foul brood, and I think the individual bee-keeper's methods of curing foul brood is something that will be of vital interest to all of us. If we have the disease, how are we going to get rid of it? Unfortunately, Mr. George S. Demuth, formerly State Inspector of Indiana, cannot be with us. He has sent a paper, which I will read:

Methods of Apiary Inspection.

So far as the treatment of diseased colonies is concerned, the advice given by the various inspectors throughout the country is probably quite uniform.

In most cases the inspectors are men who have had considerable experience with brood-diseases before taking up the work of inspection. The field-work gives a breadth of experience with the diseases under various conditions, teaching that no fixed rules can well be laid down for the treatment of any colony in any apiary at any time. This broader experience tends to make the inspector rather conservative as to general advice in the treatment of the brood-diseases.

After having examined an apiary, the inspector is prepared, in the light

of all his previous experience, to apply the general and well-known principles of treatment to the particular needs of the apiary in question. Thus in case of European foul brood he may advise the introduction of a more resistant strain of bees, urge the necessity of strong colonies, and, in the hands of a careful man, may permit experiments that could not be permitted with American foul brood. Some phases of the inspector's work, however, other than methods of treatment, may not be so uniform in the various States. The requirements for a really good inspector make the list of eligibles in any State very small. In the first place, he must be able to handle men as well as to handle the bees. Almost any one can learn to handle bees, but it sometimes requires rare skill to handle the bee-keeper.

The inspector who covers a diseased territory and leaves it with the bee-keepers in a state of rebellion, has not improved conditions in that locality.

Of course the inspector needs to be backed by a strong law, and there are exceptional cases when the law must "show its teeth." But after all, its "teeth" in spite of what the law-makers may have had in mind in framing a foul-brood measure; in spite of what penalties may be attached, or what police powers the inspector may be given by the State, the fact remains that the real value of any of our foul brood laws lies in the fact that it puts a man into the field who can teach the bee-keeper to recognize the diseases, and convince him that his business need not be ruined by its ravages.

The inspector is therefore pre-eminently a teacher, and his methods, for the greatest efficiency, must be along pedagogical lines. To a large extent the results obtained will be in proportion to the ability of the inspector as a teacher.

Again, the inspector can multiply his efficiency by adopting modern business methods in his work. The correspondence should be handled from a central office, preferably from the office of the State Entomologist, or some similar established office. During the inspection season the inspector is primarily a field-man, the office force handling the correspondence as far as possible, and taking care of his reports as he sends them in. These

reports should be made out on cards suitable for filing, and should contain sufficient data that the office may have a complete history of work done in any apiary in the State, with a record of conditions and in such shape as to make it available for reference. To insure accuracy these cards should be filled out before leaving the premises of the bee-keeper. Without such record the work loses much in its efficiency.

With such a system it is not always necessary that the inspector make a second visit to learn whether or not his instructions have been carried out. This information can usually be obtained by correspondence from the office, thus permitting the inspector to cover a much larger territory during the season. The plan has the additional advantage of placing the responsibility of reinspection upon the bee-keeper, and this responsibility is often quite a factor in his education.

During the periods of time that field-work can not be carried on, the inspector can go over his files, tabulate results, and plan his field-work. A few years of carefully kept records, filed in workable shape, will give a list of names and data that should be of great value. Circular letters and literature on disease or other subjects can be sent just where needed. Definite knowledge as to the progress of the fight against the diseases may be had from the summary of the records made from year to year, and a published report of existing conditions is of great value to the bee-keepers.

Again, the wise inspector is careful not to put himself under obligations to any individual or association, and will do well to avoid any favors that may in any way put him under such obligations. The State is supposed to maintain him on the road, and he should permit the State to do so.

It is needless to say that the inspector should not be in any way connected with the supply business, nor should he be expected to solicit membership to any bee-keepers' association, or subscriptions to bee-journals, even though he might in this way sometimes do a particular bee-keeper more good than he could otherwise. He must be free to perform his duties unhampered, whatever the cost, and bee-keepers should understand that

he represents the bee-keeping interests of the State, and not the interest of any individual or group of individuals.

In some localities the inspectors find disease continuous through several counties. This condition is especially true of European foul brood. Such outbreaks of course present quite a problem. In other localities the disease is found only in small pockets, with usually a more or less progressive bee-keeper as the center of the infested area. This progressive bee-keeper, by the way, almost invariably complains that the disease was brought in by his less progressive neighbor. Such areas offer to the inspector some hope of complete eradication, at least so far as the immediate present is concerned, and should be thoroughly and carefully covered.

In any locality that is good bee-keeping territory, even though the disease be continuous, the inspector should keep hammering away, even though the task may seem hopeless, for the time has come when brood-diseases are a great factor in the making of good bee-keepers out of indifferent ones, as well as the weeding out of the weaklings. There may not be so much in the actual cleaning up that the inspector may accomplish as in the moral support given the bee-keeper by his activities.

Finally, to do efficient work the inspector should by all means be employed by the year. He should not be dependent upon some other business for his income, with his inspection work as a side issue to be taken up when other work is not pressing. If he works from a central office, as suggested above, there is always plenty for him to do throughout the entire year. The inspection season itself can be greatly prolonged, especially in the larger States, by taking advantage of the difference in climatic conditions. If the inspector is working in a section infested with European foul brood, and it begins to disappear because of a fall flow, or lateness of the season, he can shift his operations to some other section where he can work to better advantage. Late in the fall, and very early in the spring he can work in American-foul-brood districts. Sometimes excellent work can be done in such

regions even during the winter, and it frequently happens that some of the very best work is that done before the bees have had an opportunity to fly in the spring. The cleaning up of diseased material at this time often prevents the wholesale spreading of the disease a few weeks later.

Office work and institute work will keep the inspector busy during the winter. If the central office under which the inspector is appointed is not willing that he should devote all his time to the bee-work, there would probably be no objection to his employment on a yearly basis with the understanding that he take up other work emanating from the office during a portion of the year. With this opening the inspector can in a short time build up his Division into such prominence that the official in charge will see the necessity of allowing more time for the work. In this way State aid for bee-keepers may be secured that would have been impossible to secure outside of an established office.

GEORGE S. DEMUTH

Bureau of Entomology,
Washington, D. C.

Sec. Tyrrell—Now there is one question that Mr. DeMuth has not answered, and that is, the actual method of treating a colony of foul brood for eradicating the disease. What do you do, one shake, two shakes, burn up the hive? Remember that you are treating foul brood, and as an inspector you are dealing with any kind of a man you are apt to run against that has foul brood in his yard. Mr. France, how would you treat them?

Mr. France—There is a lot in that paper; to begin with, it is not so much the real treatment of the foul brood, as to get the man educated so that he will do the work, and to leave him feeling in right spirit. If you go there and you create discord, you know how it would be.

Again, I find in Wisconsin that you have to adjust yourself according to the local surroundings. The local conditions; and you cannot make any definite rule. If I find that everything indicates that you are dealing with a very careless man, it may be best that you lay down for his individual case something definite; tell him that you want him to do so and so; if you

do not do this he will not do anything. With another person, who is practical, you cannot draw lines for him to follow—you must leave him to follow out your advice at his own option, and if he is convinced it will work to his better advantage, he will profit by your visit, and you will have no trouble with him.

Now, to lay down any rigid rule by which you can treat American Foul Brood and go from house to house, from yard to yard, I should decidedly be opposed to anything of that kind, in Wisconsin at least.

The old methods of treating foul brood have given so uniform success, that so nearly as we can apply them under local conditions, and the party who has charge, I don't know that you can improve on the suggestions in that paper.

Pres. York—Mr. Emmons asked a question a while ago, and I promised to have it answered.

Mr. Emmons—I have just half a dozen colonies of bees; they are doing fine; I don't know that there is any foul brood among them, and I don't know that there is not; now, then, I do know what foul brood is, but I don't know how to prevent it—how to use precautionary methods. Now those are the questions I am interested in. Of course it is a minor issue how, or what causes it, yet that I think is of value to us, too; it is better to know if we have it, and it is important to know how to get rid of it, and what is the best way.

Dr. Phillips—American foul brood—*bacillus larvae*—is an organism which is found only in material affected by American foul brood; the disease is carried from one colony to another, usually by means of honey coming from infected colonies; this honey may reach a healthy colony through articles thrown out through careless methods on the part of the bee-keeper or from robbing colonies after they have become weakened or dead through American foul brood.

I don't remember what other questions the gentleman asked, but as far as preventing the entrance of foul brood, that is a very difficult problem. We cannot govern our bees in their flight; when they leave the hive they will go where they please; if they bring infection to the hive the only

thing we can do is to see that the infection does no harm.

It is to the interest of every bee-keeper to see that his bees are always healthy; he can do that by constant vigilance, and it is more important to see that the bees in the immediate neighborhood are kept in good condition; it is to the interest of every bee-keeper to see that his community is kept clean from the disease; and practically the only way that he can do that is to see that there is proper supervision of it, and it is to the interest of every bee-keeper to see that there is a proper state supervision.

Dr. Gates—We would allow him to sell it; he can cut out his honey from the brood-frames and extract it and market it; at the present state of affairs it does not seem advisable to check up the sale from foul brood colonies. It has been our policy where a man had enough honey to sell, to caution him against the sale of that honey by warning him to instruct the purchasers of that honey that it was from infected colonies, and not allow it to get out where the bees would get at it. We have gone that far.

Mr. Hoffman—I want to know whether you approve of treating foul brood by the dequeening method.

Dr. Gates—We don't allow bee-keepers to do it.

Mr. Phillips—I said in my paper a while ago that we had to be careful about giving out general instructions—general directions. I think there has been no factor that has prevented the eradication of European foul brood as great as the announcement of the dequeening method; that has done untold harm in thousands of cases, I could name a great many cases where that treatment has been tried, resulting in almost the entire loss of the apiary and the discouragement of the bee-keeper to a place where he was ready to quit. I know there have been a great many cases in the dequeening method that have succeeded, but that is in the hands of experienced bee-keepers. It is a fatal mistake to announce methods generally to bee-keepers which are safe for use only by experienced men, and I would like to warn against the publication of methods not tried out. There were several articles published relative to the dequeening method, and considerable loss has resulted to thousands of bee-keep-

ers in trying this method, all through these publications.

Mr. Poore—Dr. Leonard had been experimenting with keeping his bees in a bee-house the year round, and in arranging his hives in the house he placed the hives on rims like the rims shown here, except his hives were a little deeper, and had holes in the side of the rims instead of ends as the rims are now made and used. The Doctor was not satisfied with the result of keeping bees in a house, owing to the lateness of bees getting out in the morning, so he changed to an outdoor apiary. Upon discovering foul brood among his bees, and deliberating as to whether he would adopt the Balbridge or McEvoy system, he hit upon using the rims to accomplish the purpose.

The Dr. Leonard Transferring Frames Used in Foul Brood Treatment.

I want to call your attention to the method of treating foul brood, which we call the "Dr. Leonard System." The main thing is to transfer the bees to clean hives and combs. In the Dr. Leonard System we find this can be done with disturbing the bees very little. The diseased hive is carefully lifted to one side, a clean bottom-board is placed where the hive stood, and on this bottom-board is placed the rim with Porter bee-escape on inside, and on this rim is put a clean hive with full sheets of foundation; the old, diseased hive is placed back of the clean hive about 4 or 5 inches; the old hive is raised from bottom-board, and a rim without bee-escape is placed on the bottom-board, the hive placed upon this rim with the entrance closed up, forcing the bees to pass through a hole in the rim. A tube made of a piece of wood or tin separator stuff connects the two hives. All bees leaving the diseased hive must be forced to pass through this tube and bee-escape to the new hive; this they will do gradually, and naturally as they go to gather honey.

The queen should be caught and caged ready to put into the clean hive as soon as it is arranged. The queen can be caught the next day if she cannot be found readily, owing to the large number of bees in the diseased hive. It is better, where possible, to catch the queen an hour or so before

arranging the hives to have the bees that filled themselves with honey be settled so they will unload their honey and pass from the old hive to the new, empty hive.

Any one who has adopted this method of treatment, and has used the common sense that all bee-keepers should use at all times, will find one transfer has been sufficient to cure.

The entrance to the old hive must be closed so that all bees passing from the old to the new must pass through the bee-escape, and not be able to get back into the old hive.

After this arrangement of hive has been done properly, the old hive should be left 25 days, then removed and the diseased comb and honey destroyed.

The use of these rims impressed me so favorably, for use in introducing queens, dividing colonies, and use for chaff cushions in wintering, that I had 60 made at once, and so far they have met my fullest expectations in every way.

I find all new ideas to facilitate handling bees must be accompanied with much common sense and judgment—in fact, one lacking in those qualities should let bee-keeping alone.

Sec. Tyrrell—How long do you leave the hives with that arrangement?

Mr. Poore—Twenty-five days after you have transferred the queen. When you put the bee-escape on top of the hive, often it smothers, or you choke up the bee-escape.

Committees.

Pres. York—I will appoint the Committee on Resolutions and Constitution; this committee will probably not act on the Constitution until after tomorrow forenoon's session. These will form the committee named: Dr. B. N. Gates, M. E. Darby, C. P. Dadant, Jacob Huffman and C. N. Palmer.

Pres. York—The Committee on Nominations will be the following one from each state represented, so far as I know they are represented: Michigan, E. B. Tyrrell; Ohio, Fred W. Muth; Iowa, E. E. Townsend; Indiana, E. A. Dittrich; District of Columbia, Dr. E. F. Phillips; Massachusetts, Dr. B. N. Gates; Illinois, C. P. Dadant; Minnesota, Hamlin V. Poore, and S. Dakota, L. A. Syverud.

Pres. York—The convention will stand adjourned until 7 p. m.

Mr. Hoffman—If you found the dis-

ease, and the crop ready to take off, what would you allow the bee-keeper to do?

FIRST DAY—EVENING SESSION.

At 7 o'clock p. m., Pres. York called the convention to order.

Pres. York—The topic this evening is "Honey Selling." I suppose the reason there are not any more here tonight is because many bee-keepers have no honey to sell; but next year they may have a lot of it. The first division of the program this evening is, "Is a National Campaign for Selling Honey Practical?"

Sec. Tyrrell—Two years ago, you remember, there was quite an agitation with reference to an advertising campaign for the selling of our honey, and there was formed what was known as the Honey Producers' League; that League created a fund of several hundred dollars to be used in advertising honey, and finally the League disbanded, and turned the funds over to the National Association, and I believe they made some attempt at a National campaign of advertising or publicity, as you may call it. We have heard a good deal in the journals about Karo Corn Syrup; I sometimes think that a good deal of their advertising comes by getting the people to talk a lot about it; certainly the bee papers have given Karo Corn Syrup a good deal of advertising!

The question comes up whether national advertising is practical or not, when it comes to selling honey. I know of no one who is better able to discuss that than our General Manager, Mr. N. E. France, who had the expenditure of that fund towards a national campaign of advertising in honey.

Mr. France—That is rather unexpected; this is the first I have known of it, and have not given the subject any thought, but there is a field that we as producers have not occupied. We have learned how to produce honey, and it is like reading a book—we must turn over the page and take up another phase of it; but I would like to suggest this: Before we undertake to read understandingly the page of advertising and selling honey, some of us, through experience in this connection, have to take a page in between selling and producing, and learn

how better to get it ready for the market—uniformity; better goods.

I undertook, four years ago, to establish for our Association a seal which would become a stamp of standard. As our secretary says, there is a stamp with the words, "Karo Corn Syrup, better than Honey." We all know when we buy a can of Karo what we get; it is always the same thing. You go to a grocery store, where, perhaps, on one shelf is a series of canned goods; just to simmer it down, we will say this grocery store has eight brands of canned peas, from eight different factories. The mistress at home will know which brand will suit her the best; she has a certain brand that she calls for, and if at any time she calls for that brand and it does not come up to the standard, then she will buy something else. So I found I was "up against" this proposition. Our members bought a good many thousands of the so-called seal labels. I found inside of three months they were on the market with goods underneath—the best white clover honey that could be produced; the best basswood honey; and sage honey from California—all the different kinds of honey bearing the same label; buckwheat honey from New York had the same label. The question came back at us, What is the seal for? Does it mean quality, grade, or is it simply a guarantee of the honey?

Again, a consumer not familiar with the different kinds of honey comes to the store and buys a package of honey with that seal on. The next time he buys from some other store, and the honey is very different; it does not taste like the same honey, and he cries, "Adulteration!" And there is a good deal of the cry of adulteration on pure goods because the consumers do not know what they are getting.

Now, then, to begin a campaign of advertising honey, to my mind came this idea: The people must know what they are getting; and this western Honey Producers' Association built up a trade by which the first year they sold only a little over a ton of honey, but they decided from that time the honey must be first-class, strictly as good as it could be gotten, and they label it for what it is; if it is clover honey, they label it clover honey; if the consumer wants clover honey from that association, they will get clover

honey. Now this year we have no honey to sell. That association has grown; they built up their trade until last year it was over eight car loads of honey—simply because they are educating the people along that line.

I would like to see some method which would be practical, by which we could spread out. I was in hopes that the National, through the so-called Information Bureau, might help; but there is that difference in honey, in quality; and I want to say one thing, as I have tried to help to market honey in the last three years, it is coming our way to educate the people along these lines. Consumers find we must not put unripe or thin honey on the market. I would like to do one thing above all others—to put my foot on thin, unripe honey. I don't believe our National members, many of them, are guilty of it.

The League fund was wisely planned to create a demand for honey generally, but after the fund was raised, attempts were made by which to use it to the best practical use, and we are drifting; after making some trials, it was finally turned over (about \$1,400) to this National Association, not to go into the general treasury, but to be held apart and separate for the publicity of the use of honey, or to create a demand for honey.

I was instructed, that at the first Pure Food Show at Chicago two or three years ago, to use a part at least, or all if need be, of the funds to display honey, and if possible, receive the highest reward for advertising honey with other foods. Well, it cost less than half what I expected it would, owing to the fact that some of our generous members of the National, who lived in and near Chicago, were willing to donate very largely the honey we had on exhibit.

Mr. R. L. Taylor, of Michigan, had some comb honey that was fit for first exhibit at any place, and we had a large exhibit of his comb honey. Mr. Wheeler furnished over two wagon loads of extracted honey; and I might enumerate those in and around Chicago that helped to quite an extent. We won all that the Pure Food Show offered—a diploma! And it cost us close to \$600.

Now, how much that has done towards advertising or publicity, as to

causing honey to be used, I don't know.

We had left about \$600 of that fund. We have had pure food shows since then, any one of which would have eaten up the balance of this fund, but I could not see wherein we realized on the first one, and I have held on to the balance.

Last year we had a man from New York City come to our annual meeting to urge the advertising of honey; his means were to advertise through periodicals, and a series of articles to be written, but when we learned that the first drop out of the bucket meant an expenditure of from twelve to fourteen thousand dollars, and at the end that it would amount to a still greater sum, the little "drop in the bucket" we had would not do.

These papers that have a great distribution over the country are not going to allow you to put in a written story, making it in story form, embodying the idea of honey consumption, without paying pretty dear for it. If it will accomplish what we are after—well and good—not once or twice inserting is going to do. I am at a loss to know how we are going to make a public or national campaign for the advancement of honey in a better way.

The Association offered, at Mr. Hutchinson's suggestion, cash prizes of \$5 each for at least ten of the best written articles by bee-keepers, and we published a lot of them for free circulation among our members. There were several hundred of those competing articles written, and, independent of each other, a committee of three marked them, and the prizes of \$5 were awarded. Those prize articles were all put in pamphlet form, and I mailed a copy to each member of the Association, asking that they go to their local papers and have the articles published, one at a time. The articles embodied the idea of good honey as a wholesome food, with the purpose of trying to educate the people, and I am surprised that very few papers ever reached me. I asked the bee-keepers to mail me a copy of the papers printing them, but they did not, as a rule. I don't know how we are going to get publicity. The first great need is better honey. Sell the kind of honey that will make the people want more; create a demand for it, and adopt a

plan whereby we would look after the home markets, and through the home markets gradually work out and operate more extensively.

But here is one point that some of our bee-keepers might do well to remember: When you sell comb honey, for instance, and your name is attached thereto if you sell to the consumer, that is all right, but if to the jobber or dealer, you expect him to dispose of your goods for you, so it is not right for the dealer that you attach your name to those packages; you depend on the jobber or dealer to market your honey for you, and then he wants to have the credit himself. But where your honey goes direct to the consumer, it is well and good to have the producer's name on the packages; but I would not advise any one to put the name on a package until he had goods that he is willing to stand back of.

Some have asked me, "Why don't you keep up the sealed labels?" For the reason that I do not see that it accomplished what it was intended for. Only a few days ago a man sent in an order for several thousand of those labels, but in the majority of cases I could not see that it was fulfilling its mission. Orders were lying from three to eight weeks before the orders were filled; the printers did not give satisfaction. I will leave it to the convention to discuss this publicity matter—I am at a loss to fathom it.

Sec. Tyrrell—Surely we ought to have some more suggestions. Can we conduct a National advertising campaign? Are we ready for it?

Developing Wholesale Honey Markets.

Pres. York — No. 2, "How can a national campaign be conducted for the wholesale honey markets?"

Sec. Tyrrell—I am afraid I am getting myself in deep water, but I have reserved that topic for myself. It is a topic that certainly is of much importance to every bee-keeper. I don't know why you cannot conduct an advertising campaign of national scope. It is very evident there are two obstacles to surmount—first, the amount of money it would take; and second, to have a good article to advertise.

You go to a store and buy a can of honey; take it home; it has a label on it; you say "That is good honey"

and you go back and try to get some more, next time, just like that; ten chances to one you will not find it in the store. This means that before you can advertise a thing you have to have it, and you have to come to the point where you as an Association are putting up a uniform grade of goods, so I don't believe it is practical at the present time, in the local markets, to have a national campaign, but in the wholesale markets it is possible. How many of you bee-people know what your markets are—who is the ultimate consumer of your honey?

I had a little honey on hand at one time in Detroit that I wanted to dispose of. I wrote to a concern there who, I thought, possibly might handle the honey,—a manufacturing concern. I received a reply that while they were under a yearly contract for their honey, they would be glad to have me submit a sample; I did so; I quoted them a high enough price. The reply was an order for the honey; and then I asked them if I could not bid on their yearly contract. I found they used several tons of honey in the course of a year. When the time came they said they were ready to enter into a yearly contract and asked me to make them prices, and I was not in a position to do it; I didn't have the honey.

When I was back on the farm and keeping bees, if a man told me I could have sold honey to that concern I would have laughed at him. So you see, you don't know where your honey is to go. It does not, by any means, all go for use on the table; there is a world of it that goes into manufacturing purposes that the average bee-keeper knows absolutely nothing about. How are we going to get next to these fellows?

Are you going to do away with the jobber? You cannot at the present time. The jobber is spending his time finding the markets; he knows today where to find the markets and who is in need of the honey, in many instances, that you know nothing about, and you cannot supply those markets until you get in a position to do so; besides organization you must have the supply, to furnish the demand.

The Michigan Association, several years ago, conceived the idea of get-

ting out a little pamphlet, giving the names of the members and the amount of honey they had for sale, and how the honey was put up; this (including) is the seventh edition, and the eighth edition will be mailed this week (week of August 30th, 1911), to all our members. From this the Michigan bee-keepers of today have a splendid market for their honey, so good, in fact, that buyers were scouring the State of Michigan before the bee-keepers had any possible chance to get out that pamphlet and get it in the hands of the members. What does that mean? It means the booklet is outgrown because we have to send our reports to all of our members and we get their reports back, tabulate them, and get them in printed form ready for mailing, and by the time all that is done, it is very easy for men that are "onto their job" to get ahead of it and buy honey today at 7 and 7 3-4 cents a pound, that is commanding 9 or 9 1-2 cents, f. o. b. I know that to be true.

This means, my friends, that you have to get an organization so lined up that there is a connection between the buyer and the producers of honey. Have the man that is at the head of your organization get in touch with your market conditions, know what you are doing, and then find out where the people are who want to buy your honey; make out a list of the buyers, and get those buyers' names in your hands instead of your names into the buyers' hands.

Previous to this we have been giving away our membership list and, gentlemen, those names mean dollars and cents.

Let us find out who wants to buy honey, and let our members know about it; that is a very simple matter. Let us suppose this Association was properly organized. Excuse me if I get on organization, because I am an organization enthusiast, and I believe the day is coming when this organization of bee-keepers will be an assured fact. Let us suppose you had State branches, and those branches were connected with the National, and we had National headquarters and a report from every bee-keeper in the United States.

It would mean that before the honey crop was ready to sell, your secre-

tary or the general manager would know absolutely the market conditions as well as any buyer in the country, and that information would come back to you, so that you ought to know what you are able to do in selling your honey.

You have an absolute right as a producer to get for your honey every single cent the market will bear, and if you sell your honey without doing that you are doing yourself and your neighbor an injustice.

How does that work for the buyer?

Let us suppose that Mr. France and Mr. York are the buyers, and I am the producer. I know that comb price. I sell to Mr. York for 16 cents, he is willing to pay it because that is the market price. Along comes a gentleman who perhaps does not know what we ought to get, and sells to Mr. France for 13 cents per pound. Now then, Mr. York has bought my honey at 16 cents; Mr. France has bought this gentleman's honey at 13 cents; both should have paid 16 cents. Mr. York wants to make 2 cents a pound on his honey, and so sells at 18 cents; Mr. France, to make the same, can sell at 15 cents. Is that justice to Mr. York? Dare Mr. York pay me the market price if he feels that his competitor is going to, and is willing to, sell for less? By no means.

This means that there has to be a more general understanding about what the price should be. We should not ask too much for honey, but at the same time we should ask enough. I believe the apiarist will agree with me that today conditions are becoming more stable.

Is it possible for this organization to handle the output of the United States? Some day it will be; just now perhaps not.

Are we going to form a stock company and put thousands of dollars in the business? No

Bless your heart, the machinery is there; it is working; your own apiaries are there. The commission men are there; if you could send your honey and have it honestly sold, and have honest returns, is not that enough? It means to have some method whereby you can make that fellow sell your honey at the price he ought to sell it and give you honest returns.

Let us suppose in the city of Minne-

apolis, we have a good honey market, and a man here that understood how to handle the honey-business. We want that man to handle our honey. Well, suppose a local individual shipper ships to that man—John Jones, commission man, Minneapolis; this man is dealing directly with the honey producers; in this case the producer is at the mercy of John Jones, and John Jones wants to take advantage of him (once in a while there is a fellow who does that and you have to take human nature as you find it) while, if the association was handling your honey, it would not be shipped to John Jones, commission man, but to the Minneapolis Bee-Keepers' Association or Honey-Producers' Association.

Your honey comes down here, and your railroads are instructed to deliver that honey to John Jones, commission man. This commission man sells the honey and takes out his commission for selling; he remits not directly back to you, but to the man who is in charge of your Association work; that man knows what he is selling the honey for, and whatever he is getting a proper market price for it; the commission man will pay back a rebate of a certain per cent to the association which handles the business in that way.

In the west we have a Fruit Growers' Association, and the peach growers of Georgia absolutely failed to make their product a success until they organized, and those peaches are handled on exactly the same basis that I have outlined to you.

You have to get in a portion where you are organized, and then you must have a leverage to make the commission man deal honestly.

I don't know that I have made all this exactly plain to you, but I am going to tell you that the farmers are working out that same thing in the city of Detroit; the farmers of Michigan are shipping their calves, chickens, butter and eggs to the Clearing House Association, of Detroit, and it is turned over to the commission houses for sale, and then the returns come back to the central clearing house, and they send the returns back to the man who sends the goods in. These are simply things to think of, and when we get a thorough organization of our National and State As-

sociation, it will mean much to each individual bee-keeper.

Pres. York—I think if Mr. Tyrrell were given an opportunity to work out some of his schemes, we would see something accomplished. I believe that some day we will get to it—the commission men will look to the bee-keeping associations for their honey and the producer will probably get more than he does now for his honey.

Mail Order Honey Trade.

Pres. York—The next topic is a mail order honey trade—how conducted?

Sec. Tyrrell—Mr. Ahlers was assigned this topic, but he is not here. I don't know of any one else who has any experience.

Pres. York—We would be glad to hear from anyone who has had any experience in selling honey by mail; we mean producers selling honey through the mails. Have you, Mr. France?

Mr. France—From 30,000 to 50,000 pounds a year through mail orders, giving to the customer the goods direct, the customer returning the funds direct to me, and selling in that way I keep track of the market, letting the goods do their own advertising. Away from home as I have to be, I cannot produce all the honey I sell, and have to buy several tons to help out my own honey market, which is a mail order market; but here is the only objection to that: It is hard for me to buy honey that will take the place of the shortage that I have to make up and get the quality of goods that I can keep up my home reputation.

I was at a certain man's place a little over a month ago; a misfortune had come in the way of a tornado; he had quite a lot of basswood honey; he made me a price for the whole lot, and I practically contracted to buy the same. Yesterday I got a line from him that the bees had been working on a later bloom, and that there was added in the combs of the darker grades, so that he could not give me the straight basswood. Now what shall I do? If he sends it to me I cannot fill my orders with it.

I am satisfied Sec. Tyrrell's plan, the outline he gives as to the wholesale market, is all right. We must protect the commission man, but until such a plan as he has suggested can be put into operation, we should look after

our mail order department individually, and it doesn't cost a great deal to do that.

In a certain county in lower California they have a co-operative organization, and they send out a little pamphlet once a month to every member, who is asked to fill it out with the amount of honey he has, whether it is light or dark, what the buyer is offering, and what he is asking; and then they get these blanks in duplicate form, and they know where they stand and what is what. One of our association members told me today that he bought a car load of that Imperial Valley honey within the last few days. That is not directly a mail order business, and yet they are selling quite a large per cent of their honey in that district by mail, with a salesman on the road.

After they have received a list of names they put a salesman on the road, but there were five car loads of their honey that went to New York City two weeks ago through mail order sale, without anyone going with it. You have a good, first-class article, and solicit your trade by mail; you send a sample of your honey, and your neighbors must have some of it, and you get a list of those who want honey, and I am sure that you could not produce enough honey to supply your trade.

Mr. Wilcox—That is almost a hobby with me. I am not doing as large a business as Mr. France, but I have always sold ten times as much as I could produce; it has always been by mail order. I worked up a market by traveling; then after that the orders came to me; from that time down the last 20 years I have been abundantly supplied with orders for all the honey I could buy, and at a fair price. I was crowded into that kind of business by my neighbors who were producing a good deal of honey and selling it at ridiculously low prices. I reasoned with them and asked them to ask more and they said they could not get it. I reasoned with them, and offered them more, and then I had to sell it. For several years I sold a car load to the National Biscuit Company without any trouble, but now they get their honey from other sources—a cheaper grade of honey. You can get your addresses in many ways. Quote prices to grocers and add samples, but I would not send

samples out promiscuously to everybody; I have four or five different grades of honey; even the first extracted clover honey is not the same as the last extracted; then there are grades of darker honey; you must send samples for the purpose of being assured of giving satisfaction. Three-fourths of the men do not want to, and will not go into that business; it is only necessary that one or two men engage in it in each county, and they will handle all the honey, and hold the prices uniform for the same grade of honey.

Harry Lathrop (Wisconsin)—I want to ask Mr. Wilcox how much he ought to make—a fair percentage?

Mr. Wilcox—He ought to make as much as a commission man makes who takes no risks; the commission man asks you 10 per cent, and the local buyer ought to have 10 per cent from his neighboring bee-keepers. To be sure of getting that, you sometimes will have to figure for a little more perhaps from $\frac{1}{2}$ to one cent a pound for extracted honey, and from one to two cents on comb honey.

Developing a Local Market.

Pres. York—Our next subject is—How can a campaign be conducted for developing the local honey markets?

Sec. Tyrrell—This was assigned to a man who has had some experience in selling honey—Mr. Wesley Foster, of Colorado, and like a good many others, he could not be with us. Mr. Foster's paper read as follows:

Developing the Local Market.

Every good thing grows through advertisement, and without it nothing but plants and animals will grow, and I do not know as they will. We will, however, leave that to a later date for discussion.

Things grow through good report, and dissipate into thin air through evil report. I do not agree with some men who think that any kind of publicity is advertising; that is, even the publicity of the divorce, civil, or criminal court.

Advertising honey is of many different kinds. A half dozen bee-keepers producing and shipping several cars of honey will be reported and talked about by many, and will stimulate local sales of honey. If one wishes the local market to be improved, a bee-news item should never go unreported.

Let the papers have these items; crop conditions; crop qualities; sale of bees; moving of bees, especially in car lots. There is now too much mystery connected with the industry, which is the main reason why comb honey canards are believed.

You cannot make a manufactured egg story stick well enough to affect egg sales; but honey sales are much less than if these stories had never been published. If the people knew as much about bees as about chickens, these stories would not find willing believers. We know that advertising of the right kind stimulates honey consumption.

Display in Stores.

Cultivate the acquaintance of the grocers, and if you are supplying the local demand, make it a point to have comb and extracted honey of uniform quality and style of package throughout the year. This is important; and also see to it that the grocers have the honey displayed. It pays to give the grocer and each clerk a sample jar to take home, for if the clerk or grocer can speak from experience as to the honey, much more will be sold. One grocer who called the attention of each customer to his honey, sold a case of two dozen jars in one day. It happened to be some honey which was liable to granulate soon, and he took this method of disposing of it, which shows what can be done.

An observatory hive of bees may be profitably used in the local store window's display of comb and bottled honey. This method of stimulating trades with us resulted in the principal of one of our ward schools asking for an illustrated talk on bees before his pupils, several hundred in number.

Advertising honey in the papers locally has not met with the success that tasteful displays in the stores have. "Write ups" on bees advertise more than just an ad., which reads, "Fine Honey for Sale, by Foster, 2113 Arapahoe Ave." The past year the writer disposed of about \$1,500 worth of honey locally, the comb selling to the stores at \$3.50 to \$4.00 per case, and the extracted at 10 to 12½ cents per pound, according to size and style of package.

House to House Peddling.

Personally I do not like selling from house to house, and I have not done it

since a boy. An elderly gentleman, however, bought honey of me at \$6.00 per 60-pound can, and put it in pint Mason jars to sell at 30 cents a jar. California honey from the sage, and water white, he sold for 35 cents a pint; he paid me 22½. His prices were about 5 cents a jar above what the stores were charging, so that I had no kick coming from the grocers, who usually oppose house to house peddling. I really believe his sales stimulated the honey-trade throughout the town.

To sum up: Alertness and eagerness to get the business, and promptness in delivery counts. Be so interested in bees and honey that you will fix up a display for the grocer; give talk to the school children on bees; give stereopticon entertainments with "Bees" as a subject; prepare "write ups" for the papers. Talk bees with the grocers, clerks, and everybody you may have a chance. Dress neatly; act modestly, and don't impose your subject on unwilling ears. But be enthusiastic. Corn syrup will be sold, so will imitation maple syrup, but don't get peeved at this—they are cheaper than honey, and many think they cannot afford honey; you can convince a goodly number of the excellence of honey, however. Do not have a cheap price—they'll think it's adulterated.

WESLEY FOSTER.

Boulder, Colo.

Size of Package for Retail Trade.

Sec. Tyrrell—Let us pass to the 5th topic—"What size package should be used for the retail trade?" There is a gentleman with us tonight who I know has a great deal of experience in the retail trade; he can offer some suggestions as to the size of packages that is best for the retail trade—Mr. Harry Lathrop.

Mr. Lathrop—I have not sold a whole lot of honey, but I have sold all I could produce, and last year, twice as much. I had to purchase honey—found that the 10 pound package was the best for me; that is, I put up a 10-pound pail, and I got 10 cents a pound for the honey; in the first place, I used nearly to fill the pail; then I didn't get quite 10 cents a pound for honey, and didn't get anything for the pail. But since I made the package weigh 10 pounds it sells just as rapidly. I know

that is not a high price, according to what other people are getting for a small package of honey. I thought it was good, because before that I got only 8 cents a pound for my honey in 60-pound cans, and lost the package. Now I am making my honey net me 10 cents; but here is a man who is putting up honey in glass packages doing better than that, and I want to look into that matter and see if I can do a little better; but 10 cents is a very fair return for the producer, and you can work up such a trade. I sell a great many pails to farmers and railroad men; sometimes the train crew, passing through our station, buy a number of pails. I sold a pail to the engineer, the fireman, and the conductor, and one to each brakeman on the train, and the express messenger, mail messenger, and also on the passenger train. If they once find out where they can get this honey, then they will tell other people at the terminal stations, and they will want it, and send by their friends for it. Traveling people buy a great deal of honey, if you have a uniform package. And about the quality—of course, I never extract honey until after the honey crop is gathered, and all sealed up in the comb, and is dead ripe; I never have trouble. Of course, there is quite a difference in the color of honey, and the flavor, but if you are careful you can find people who like all the kinds of honey you can produce; I sell the dark honey to some people who like it, and sell the light to others who like that; you can get as much for the dark as for the light.

J. A. Holmberg (Minnesota)—Some years ago I sold honey at 15 cents a pound in the home market, and had no difficulty in selling it at that price. Later on I sold it for a shilling a pound. I could sell from five to ten thousand pounds in the home market for a shilling a pound—extracted honey. The other day I was down in the southern part of the State, and a bee-keeper said, "I never sold any honey at less than 12 cents; I have 100 colonies of bees, but I would not sell it less than 12 cents; that is my price, for 1,000 pounds, and I have no difficulty in selling it at that price." I find this condition prevails. If you sell it for 10 cents, they may like to have it for 9 cents another year, and when you sell it at 12 cents, they may want it for 11 cents. When I sold it for 15

cents, I sold several thousand pounds at that price.

Pres. York—Why did you reduce your price to 12 cents?

Mr. Holmberg—There were other bee-keepers who came down, you know; some charged only 7 cents. Honey is worth 12 cents a pound this year.

Pres. York—You should have bought that honey at 7.

Mr. Holmberg—It was already sold.

Dr. Leonard—This matter of co-operation is one of great importance to the bee-keepers, I believe. We had a little touch of co-operation in this State about five or six years ago; it was not a success, but it set me to thinking about co-operation and the means that we should take to perfect that system, and I believe from what experience we have had here, and what I know about things, that co-operation has to start in the National Bee-Keepers' Association. You cannot start it in the different States by local associations, and why? Because every other bee-keeper in every other State is looking for a market for his honey, and no matter what you do in this State, the other fellows are not bound to conform to your principles of co-operation. Therefore, if we had co-operative organization in this State, the men who stood out for certain principles in this State would simply "get left" with their honey on their hands, because the shippers from Colorado, California, and Utah would put in alfalfa honey, and they would supply the market, and Minnesota honey would just simply stay with the bee-keepers.

In order to make co-operation a success, we have to have a central organization like this, so that the National Bee-keepers can say to the Colorado Bee-keepers: If you want to ship honey to Minnesota, you charge so much for your honey; that is the market price of your honey there; they can say to the Wisconsin bee-keeper, or the Illinois bee-keeper, or any one else—"Your honey is worth so much in the market."

We have to have a central organization covering the whole country, or else your co-operative movement is going to fall as flat as can be.

J. Kimball (Minnesota)—I like the plan which our secretary has presented, and I want to say that we have

an illustration of that at Duluth. The Commercial Club, in Duluth, wishes to aid the farming industry in that part so they would not be fleeced by the commission men, united several organizations, and it was called the co-operative Producers Association, and branch organizations were put at different stations so that farmers could go to the warehouses at that station with their products, and then ship to Duluth to the co-operative agent there, who worked on a salary and charged 10 per cent for selling the same at best prices. He was in touch with the markets throughout the country, and could foresee something of what the market would require, and the farmers were induced to raise a certain kind of potatoes and sold them by the carload.

It seems to me a similar plan has been referred to, and can be inaugurated by this association, having its head in different large cities, and in that way selling under the market not to do so; call their attention to it and induce them to ship through his agency and sell to the best advantage, and they could be much benefited in this way.

As soon as this is started and they understand they are going to get so much more for their honey, they will fall in line, I think. Of course, much depends upon the quality of honey; if honey is all put up in five-gallon tin cans, and everything clean, it is going to be sold.

It is not necessary that the honey be of the same color or flavor. Some like the dark and others like the light as well. I have a jobbing trade; a retail trade of putting it up in glass pint jars, but I think of cutting out the smaller sizes and letting some of these other farmers sell it in glasses if they want to. I have families who will order those jars; one man orders six for his family, and another, the other day, three; there is one lady who was out of health; she took eight; her health was restored, and she credits it all to the honey. I like that way of putting it up for my trade because it looks well; they can see the honey through the glass, and it sells; the looks of the honey through the jar—that clear view of its color—helps it to sell. I have little difficulty in disposing of my honey at better

prices than has been mentioned here tonight.

Pres. York—We have one Illinois man who says you won't get good prices for honey unless you ask it.

Mr. Tyrrell—The retail trade is of two kinds or more; I am engaged in other business, and sometimes if I have a line of grocery men buying of me, I consider that retail trade. This would apply also to those who are at lunch counters or in railway stations; they want it in the smallest possible quantities, in the smallest packages possible; there are others who want to retail it to the farmers who want from 10 to 60 pounds; so the size of packages must depend upon the class of retailers, also the kind, whether it be in tin or in glass; I don't know but what I have covered the ground.

Pres. York—I think you will find the grocery trade does not care for extracted honey except in small packages.

Mr. Wilcox—In the larger cities, the smaller are the packages.

Mr. Poore—I am a little puzzled about what the situation is going to be in the near future. I have spoken tonight about thousands of tons of nectar going to waste for want of the bees to gather it; it seems to me when people are educated it will be different; people learn to use tobacco and it makes them sick to learn to use the most healthy sweet on earth.

I don't feel over afraid of overstocking the market with honey. If we would form some co-operative movement to put nothing on the market except what is truly ripe honey, and advertise it enough among the people to make them to think—they would want to try it, and would get over this idea of adulteration, and I think we would not be able to produce honey enough to supply the market.

I was at the place of one of the largest honey producers in the State that I know of, and I tried to get honey of that man last year, and he had none. You take honey that is real honey, and a man puts his trade-mark on it, and guarantees it, and for anything that is found impure guarantees to give \$50.00 if the seal is not broken, and get this honey before the people so they will know what it is—I will wager you that you can't get enough of

that honey to supply the demand. I can sell what honey I produce within a radius of 10 miles within the next ten years.

I am going to put my honey out absolutely right; I am going to put my guarantee on it; I am going to produce all the honey I can without any fear of selling it. When people learn that you are furnishing nothing but pure, ripe honey, they would not want the other stuff. Let them learn what good honey is. I believe it would be well to put a notice in the papers calling attention to honey as being the best of sweets for the human being.

Sec. Tyrrell—I want to drive in one nail with reference to the price you got for honey. If you didn't know anything about the honey-business and I should come to you and offer you comb honey at 16 cents per pound, and then should tell you that you can have some nice extracted honey for 12 cents a pound, and you didn't know but what the extracted honey was produced by squeezing the combs, what would you think of the extracted honey? Understand, you are not a bee-keeper, and that you don't know how the extracted honey is produced, and honey is offered you for 10 cents a pound when you know you are paying 16 cents and 18 cents and 20 cents for comb honey—what is your conclusion? Why, you think the extracted honey is half glucose!

Mr. Kimball—Does any one here know anything about the custom of the druggist selling honey? One druggist told me a short time ago that he took honey that he had bought and clarified it, and then he mixed a certain per cent of glycerine with it before he sold it.

Sec. Tyrrell—They use it in medicine; the pure food law would not let them adulterate it.

Mr. Miller—Being a druggist, I know something about the price of glycerine. Glycerine sells in quantities of 50 pounds for a good deal more than you have to pay for honey; your glycerine today would probably cost you 23 or 24 cents per pound bought in 50 pound lots.

Mr. Wilcox—I have sold a good many barrels of honey to druggists to be made into cough syrup.

Pres. York—Any other questions

you would like to ask; we have fifteen minutes yet before nine o'clock.

Foul Brood and Bees in Trees.

Mr. Krause—I wish to know if foul brood is carried from wild bees in trees.

Mr. France—I know of a man who said there was no use to try to keep foul brood, for it was in the woods; that there was positive proof that the woods were full of it. Following a colony of bees from diseased hive to tree in the woods, 2 months later he cut the tree, examined all stages of brood in the new comb in the bee tree. No signs of disease. How could there be; as those bees on arrival to tree had to consume all the diseased honey in their honey sacks, to produce the wax to form first place of deposit. Only one possible way a bee tree can be diseased; is after comb in bee-tree that colony could rob some diseased bee-hive and carry to the tree the diseased honey and store it in the comb already built. In that case the colony will soon perish and squirrels and wax moths will soon clean out all danger. Several times I have proven this to be the case.

Mr. Leonard—I would like to ask Mr. France, or some one else, if foul brood is likely to show up after treatment in the first generation of bees, as readily as it does in the second generation.

Mr. France—Do I understand you that after a colony has been treated, would it be more likely to show up—have the disease reappear in the first or second generation of bees? Generally speaking there would be so little of it in the first generation that you would pass it by without notice; in the second lot of bees we would notice it more prominently; that is, the first lot of brood, after treatment, we would call entirely free of disease, and later we would find the disease considerably in evidence.

For instance, in my own State, a man that five years ago had foul brood in his yard in quite a number of colonies—I was there, and we treated them all, and then didn't find any trace of it; the next year we didn't find any; this year was an off year; and this season I have been by his place three times, and have asked him, "Have you seen any indication of the disease in

your yard?" "Not at all." And only a few days ago he discovered it; it has not been lying idle all this time.

There is another man who has imported bees in there, who has violated the State law, and there will be "something doing" when I get away from this convention!

Mr. Leonard—We have this disease of foul brood in a pretty fair way towards exterminating it, as far as the treatment goes primarily—the primary treatment of putting bees on foundation and exterminating it in that way; that is pretty nearly a stale science now. I want to go on record as making a demand of the government that it shall find some way—make some special effort to find some means to disinfect the combs of foul broody colonies, so that they will not have to be destroyed.

Now, the reason for this is that I had several colonies of bees, two divisions to each colony; that is more than 1,200 combs, all drawn out in fine working order, the summer just past. A few days ago, I melted up the last of those 1,200 combs. Now, do you know that means labor and expense, to disinfect those combs and get new foundation? You do know it if you have been through this business of treating foul brood—you then know something about it.

I know there is some way of disinfecting those combs, so that they will not have to be destroyed, and the government should make a most desperate effort in behalf of the bee-keeping industry to find the remedy.

Mr. Krause—I wish to question Mr. France a little more about this bee-tree business. He tells us of an experiment which he tried, to see whether the bees would carry foul brood from a hive that had foul brood in, and move it into a tree, and after his thorough investigation he found there was no foul brood. I know that I have shaken a colony of bees out of the hive to see whether they would have foul brood, and I found in one shake they would have; we tried two shakes, and that cured them; if this would work with all colonies, like Mr. France tells about this particular bee-tree, that would be quite an easy way to get rid of foul brood.

Mr. Hoffman—When we shake a frame we disturb them, and they make up their home somewhere else, but

they will cluster a while; they will probably be a day or so in finding the top part of the tree, and all this time they are consuming this honey they have taken with them, and by the time they get it started they have it all consumed; I think that is the difference between shaking and letting them swarm naturally.

Mr. Krause—I think that Mr. Hoffman is about right. Last year I took about 25 natural swarms with comb out of foul-broody hives; but I put them in a bee-cellar, shut them up and kept them there from 48 to 60 hours; after the first batch of brood hatched, I looked them all over carefully to see if there was any foul brood, and didn't find a trace of it; I was satisfied that we cured them. I put them in the cellar last fall and winter, and this summer I found foul brood cells here and there; then I thought my treatment was not so good, but afterwards I found that a neighbor of mine, who had bees, had a good deal of foul brood, and I traced it there as being where I m.

The Convention then adjourned until Thursday, Aug. 31, 1911, at 8:30 a. m.

SECOND DAY—MORNING SESSION.

Pres. York—The first number on the program this morning, is the President's address. I wish there were more here; I would like to have a full attendance at the start, for this is a very important session—the business session.

President's Annual Address.

To the members of the National Beekeepers' Association, Ladies and Gentlemen:

It scarcely seems possible that it will soon be a year since last we met in annual convention. How time flies onward—how rapidly events transpire. We are in a world of changes—of progress—and in no line of human endeavor and development has there been greater advancement than in our own fair beedom. It is a far reach from the straw skep, the bee-gum and the old box-hive of our fathers to the movable-frame hive with its section-box, surplus arrangement of our day, from the "strained" and the "cut-out-with-a-butcher-knife" comb honey of the last century to the beautiful, clear,

clean extracted honey and the mouth-watering section comb honey of the present time. In line with the strides made in the invention and manipulation of hives and fixtures used in the culture and care of bees, it is necessary that the organizations or societies of bee-keepers themselves shall also keep step with the march of progress, and from time to time make such change in their constitution of management, as shall permit of the undertaking and of the actual doing of things that can be successfully done by co-operative and united effort on this particular line. I wish to mention one or two other subjects, and then later take up the consideration of our National Association.

Honoring the Dead and the Living.

That grim reaper, Death, has been busy since last we met. In addition to the removal of a member from our ranks, Ex-President and Ex-Secretary W. Z. Hutchinson was called away last May 30th, after months of struggling against an enemy that finally overpowered him; and only a short time thereafter, on July 12th, Ex-President Geo. E. Hilton was compelled to surrender to the insidious foe of cancer of the stomach. Both these apiarian leaders were from Michigan, and both good men and true. What an inspiration it should be to us who are left, to remember that bee-keeping won to its realm such noble men as these, and also others, who still abide with us. But while some good men are gone, their works are not dead—their influence will still go on for many years in the future.

Among those to be congratulated that old Father Time has dealt kindly with them, is the friend of every bee-man and bee-woman—our own Dr. C. C. Miller—who rounded out his 80th year of earthly existence on June 10, 1911. What a benediction to bee-keepers he has been for half a century, and is yet, and we all hope that he may continue for many years to come. He is surely the "Grand Old Man" of American bee-keeping, and possibly of the whole world. Would that he might be able to be here with us today in person, as we know he must be in spirit. A resolution of congratulation and appreciation from the Committee on Resolutions would be most fitting, I am sure.

It would be a nice thing if all who

have labored so unselfishly for the upbuilding and advancement of American apiculture could be suitably and substantially recognized, but as that would be quite impossible, let us resolve in our heart of hearts to have a more definite sense of gratitude for all the noble men and women who have preceded us, and who gave of their brain and brawn that bee-keeping today might occupy the honorable position it does among the delightful rural pursuits of our glorious America.

Bee-Disease Legislation.

During the past year many of our States have been successful in securing from the legislatures suitable laws for the eradication of bee-diseases, notably foul brood. This awful scourge among bees in its two-fold variety has been spreading at an alarming rate, and unless all the States shall very soon enact the necessary statutes for its suppression, bee-keeping itself will be suppressed, wiped off the earth, in the not very distant future. If there is any one thing upon which there should be the utmost unanimity and fullest co-operation on the part of all bee-keepers, it is the effort to secure laws that will, through rigid enforcement, stamp out the dread disease of foul brood wherever it exists; and yet I regret to say there are a few so-called bee-keepers who have been so diabolical as to endeavor, through misrepresentation and belittlement of the danger from bee-diseases, to thwart the efforts of good men in our ranks who have devoted their own money and much time in endeavoring to secure the passage of needed laws against the spread of deadly diseases among bees. Notably, this censurable moment has occurred in Illinois, and also in Pennsylvania, I understand. Of course, only a little longer time will be necessary to get the much needed laws in all the states, but what a shame that an already difficult work should be hampered, and almost frustrated through the influence of those who should help instead of hinder, what would eventually be as much in their interest as for those who with might and main have so unselfishly struggled for the passage of bee disease laws. Let us hope that very soon there may be a concerted effort put forth on the part of all bee-keepers, that bee-keep-

ing may be saved from extinction through a further spread of contagious bee diseases.

The Government and Bee Culture.

We as bee-keepers should note the increased interest that the department of Agriculture at Washington is taking in the interest of bee-keeping. Recently the annual appropriation to be used for this work has been raised to \$15,000. Several experts are now employed by the Agricultural Department, through the bureau of Entomology, who are devoting their time to investigations principally along the line of bee-diseases. Dr. E. F. Phillips, who is here today, is "In charge of Apiculture," and with his able assistants we may expect even greater things done for bee-keeping in the future than he has been permitted to accomplish in the past; and he has carried on and out a great deal of valuable work for bee-keepers since he was placed in his present very important position.

While I am sure that Dr. Phillips is abundantly able to speak for himself and his work, yet I feel like urging bee-keepers everywhere to co-operate in every possible way to make the efforts of Dr. Phillips and his corps of workers return the largest possible dividends from the investment that is made. Let us all appreciate what our Government is doing for us as bee-keepers, and then work will not only be continued, but greatly enlarged from time to time.

The Future of this Association.

We now have come to the time when others besides myself think that the Constitution under which this National Association is being conducted should be revised, or re-made, so that it will permit a broadening out of the work to be done for its thousands of members, as well as for the upbuilding of bee-keeping in general. Other lines of rural industry have found it greatly to their advantage to co-operate, especially in the sale and disposition of their products. A notably successful illustration is the fruitgrowers of California. Prior to their united efforts the fruit was marketed at a very small profit, and often at a real loss; but now so effectively are they organized, and so unitedly do the fruit-growers of

California co-operate when it comes to marketing, and their annual losses on sales are reported to be only about \$4.00 in total of from twelve to fifteen million dollars worth of fruit.

It is true that bee-keepers are more scattered than most producers of farm products; and their combined output of honey may not be so great in value, but I believe that if there was a systematic effort made by this National Organization and affiliated Local Branches throughout the country, it would not be very long until a better distribution of the honey crop would be secured, which would result in an increased net price realized for the producers.

At present everything is haphazard when it comes to selling honey. Every producer for himself, and the fraudulent commission man takes the hindmost, is about the way it is now done. Thus there is no uniformity either in grades of honey or in prices secured. It seems to me that all this could be easily and speedily changed by a systematic producer and united effort that would help to direct honey-producers how to grade their honey, how to prepare it for the market, and where and when to dispose of it to the best advantage to themselves as producers. I have contended for years that if all of our population could once be shown the true value of honey as a daily food product, we would use honey as a daily food product, we would find that there is not a tenth part of the amount of honey now produced that would be needed to meet the demand. What would such a condition mean? It would mean that as prices increased, those now in the business would "keep more bees," and many more who are favorably located would go into the business of producing honey. So that all the people who desire to "sweeten up" with the product of the hive, could be accommodated. And those engaged in producing honey would be more prosperous and happy. But such increase in the demand for honey can be brought about only by co-operation on the part of producers themselves, I firmly believe; and I am also convinced that this National Association should put itself in a position where it can take the leadership of a movement that will permit of its directing the grades of honey, the shipments of honey, the advertising of honey, and in

fact everything that can be done to put honey-production upon a firm and more profitable business basis.

But there is one thing along the honey-marketing line that should be especially and continuously emphasized, and that is, the **home demand** for honey should always be supplied **first**, before seeking a distant market. Many of the smaller producers, and even some of the more extensive ones, have been surprised at the size of a demand for honey that can be worked up at home, or in nearby towns. The Dadants have had an interesting and successful experience in this matter. They have found that it pays, and pays well, to take care of the home people when it comes to selling honey. Of course, it may take a few years to build up a paying trade—but suppose it does. It is said that "Rome was not built in a day." The trouble with us Americans is, that we get in such a big hurry. We want to accomplish things, or "get there," **at once**. Horses are no longer fast enough—we must have automobiles! We are not now satisfied with express trains—we want to **fly** through the air like the birds! The fact is we are going too fast a rate to permit of real progress. The strong, sturdy oak is not grown in a night, though the soft, pulpy gourd may be. Let us not be impatient, especially when it comes to building up a paying honey market. This will take time, but it will be time well spent. We should be careful always to furnish our customers a good grade of the ripest honey, then the kind of life in your community that will inspire the confidence of your neighbors, and it won't be so very long until they will be willing to pay a few cents extra per pound for your brand of character and reputation when they come to know that it accompanies your honey, or anything else you want to sell to them.

But as I may be trespassing upon the field that some other speaker may wish to occupy, I will stop. There are many things that are of exceeding importance that I should like to touch upon, but perhaps I could not speak to your edification, anyway. There are methods and procedures that I am sure this convention can inaugurate that will put the National Bee-Keepers' Association in a position where it will be of more benefit to the bee-

keepers of America than it has ever been before, although it has done some splendid work during the over 40 years of its existence. But the new times require new ways of doing things. Old things must pass away. We are living in a far different age from that of even 50 years ago, and a large progress and advancement are being made in every line of human development. Bee-keepers must not lag behind. It is our privilege and duty as members of this Association to devise ways and means by which the industry of bee-keeping shall go forward to greater achievement, and be more useful to its members and to humanity than ever before. Are we wise enough to do what should be done? Are we willing to do our part? Upon the correct answers to these questions will depend much of the success or failure of American bee-keeping during the next few years.

I thank you for your attention. I trust that I have said something that will arouse you to action, and that as a result of such action, the future years of success in honey production will prove the wisdom of what shall result from the deliberations of this gathering of bee-keepers.

GEORGE W. YORK.

Chicago, Illinois, Aug. 29, 1911.

Pres. York—The next number on the program is the General Manager's report—we will hear from Mr. France.

Mr. France—I have been too busy with the clerical work of the association to take any time to write out anything, and hardly to give it a thought that would be deserving your attention.

Our association numbers 4594 members on the roll; some of this number have not paid their dues, but the greater per cent would renew when notified.

I find that we have 31 states and 15 local associations sending dues to our National, besides the individual \$1.00 membership.

New York counties affiliate with the State, yet each county sends dues direct through the Secretary of the association.

You may want to know something as to what work we have been called upon to do. Some two or three years ago I was advised by the Board of

Directors that we were having a good many calls from our members in apparent difficulty with their neighbors, not bee-keepers. This applies more especially to those who are city bee-keepers.

In fact the National Association was formulated for that object to begin with—an insurance—a protection—these other features have developed since. We are working hard to overcome the cry of adulteration of honey. One Iowa merchant sends a sample (by the way, comb honey) that he purchases from one of the Ohio bee-keepers; the flavor was different from the honey he had been marketing, and he came out openly and publicly denounced the honey as adulterated, and would not put it on the market.

Well, now, it hurts the market in that Iowa city wonderfully, and he wanted to hurt the reputation of our Ohio bee-keeper, but I stood in between. There was nothing wrong with the honey—only that man needed to learn that honey would granulate in the comb, and that the flavor of the honey from different kinds of flowers was decidedly different.

One other neighbor of one of our bee-keepers claimed his near-by neighbor bee-keeper was feeding syrup extensively to his bees, and was therefore selling impure honey. This man went abroad, and that hurt the market in that vicinity, the news having been spread that this bee-keeper was feeding his bees sugar syrup. All of which might have been true.

The Association has been called upon to investigate many cases, and has done this as far as possible with the limited means at its disposal.

We found a condition of poisoning existing in one place; the bees had been poisoned for no good object. The neighbors had become unneighborly, and one was a member of our Association. This particular neighbor had for revenge or spite put some poisoned syrup outdoors purposely to kill his neighbor's bees, and I had some little trouble to settle that difficulty, and it took me some time.

Mr. Leonard—How did you settle it?

Mr. France—On the ground that under the laws of the state he had destroyed property maliciously; he willingly paid for the loss of those bees rather than go into court.

One man sends \$1.00 as dues, and then asks for help! Another one sends \$1.00 for a queen-bee to one of our advertising queen breeders; four months later, having received no queen-bee, he asked the National to make good for this \$1.00. Four weeks after that he got his queen-bee, but it was too late in the season.

Another man sent \$14.50 for queens, and never heard anything of them; he wrote that he had not received the queens or the money.

I have tried to encourage many of our members in what might be called the "No Pay Roll," under the Information Bureau. If you find some one who is poor pay—a poor customer, or is in the habit of buying things on credit and never paying for them—why should not the rest of us know it? It would cost the Association very little to have that list.

We have had a number of cases during 1911 where it has been claimed, in cities, that bees are a nuisance; two cases in Canada; two in Michigan; two in New York; two in Illinois; one in Oregon; one in Ohio; one in Indiana, one in Kentucky. With the exception of the one in Canada, these cases have all been closed; one is coming up in Canada this fall—next month, in September.

In one of these cases there were 160 colonies of bees 80 feet from a neighbor's back door; the location was such that the bees in flight went right by the neighbor's house; it was not so much the bees, either, in that case, as an unfriendly feeling between the two, but the bee-keeper in this case was not doing his part to make things agreeable for his neighbor, and did not put a little barrier between, as he should have done, to carry those bees up and away from the neighbor's house.

One man objected to his neighbor keeping bees for six weeks; he wanted him to take them away, and said he might bring them back in six weeks. He was putting up a dwelling 50 feet from where the bee-yard stood, and the bees bothered the carpenters, and they had to quit. Well, I had considerable controversy in the matter, but we had the bee-keeper smoke the bees a little in order to quiet them, and by velling the carpenters, the house has

been built, and the two are good friends and neighbors. The bees remained.

One instance I might cite of a petition being made to the city to remove the bees as a nuisance because they spotted the clothes hanging out on wash-day; in fact, I have had eight of those cases, and in some there was pretty good ground for complaint.

If the bee-keeper would only do his part; these troubles occur mostly in the spring when the bees are about to have their first flight; and if the bee-keeper would see to it that the washing is not out at the same time of the the bees' flight, it would obviate a great deal of the trouble. On the other hand, we had better put the bees out some other day, if the neighbor is washing; and if the clothes are spotted—pardon me if I take a selfish view of the matter—I think the bee-keeper should re-laundry those clothes!

In one case in New York where this came up the bee-keeper was asked to pay for the laundering of the clothes; he simply folded his arms (and the defiant way in which he did that makes me blush) and said, "What can you do?" Had there been any means by which I could have dropped him as a member of our organization I would have done so. It causes us quite a little work to get out of these difficulties.

In California some bees were stolen, and the National was asked to make the fellow pay for them. The state laws look after such things.

In three instances the supplies were not satisfactory, and the National was asked to take the matter up; I don't think it is the policy of this Association to take up such matters.

One member was lodged in jail, and he sent in a petition to have the National liberate its member from jail! (Laughter.) I investigated the case and found it was a wrangle between himself and his prosecutor, and that he was locked up for good cause! (Laughter.)

One of our members was in the hospital, sick, without money; he was in a critical condition; he wrote, "Could the National Association help him in loaning him a little money until he can get out and begin to earn?" Well, are we in a position to be helpful in cases of this kind? Knowing the man, I sent him of my own funds a little, and since

then he has been very nicely remembered through the Association.

In Illinois, only recently, one party complains to me that he is losing his bees very fast, and that unless something is done soon he will have no bees left; that a new form of flytrap, to catch flies with sweetened compound of some sort, is not only killing the flies but catching all the bees. I don't know whether we can do anything for this man or not. If a man has a right to put out sweetened paper to catch flies, our bees are trespassers if they go there.

Another one of our members gave a mortgage on his bees as security for some borrowed funds, and right after giving the mortgage he sent \$1.00 dues to the National, and then asked us to help protect him from being foreclosed on! (Laughter.)

Now let us in some way avoid some of these things so that the National Association can drop out of this line of little grievances, and advance to the age of the times which are coming.

Just one thing in regard to the troubles we encounter, and the case I am certain is still pending in Michigan, and I think is going into court: At a watering-tank near to an apiary belonging to a neighbor, the bees go there for water to that extent that the stock dare not go there only at night to drink, and it is a great nuisance. The man who had the watering tank had applied to the city for an ordinance prohibiting the keeping of bees in a city.

I wrote to this man that if he would allow the National the privilege, I would guarantee within 24 hours he would have no more bees bothering his stock. I wanted the privilege of covering the tank bee-tight, with opening in cover large enough so the horses and cattle could drink, and they would have no more bother in that way.

Now as to the financial condition of the Association. On November 1, 1910, we had \$500.47 left; since then there have been 261 who have paid \$1.00 each, and 571, fifty cents each, which brings the amount up to \$832.50 at the present time.

There are many who have joined through local associations, and I have notified the secretary of those associations of this list, and they guarantee

at least 80 per cent. of those will be renewed by the time I get home, so that this only shows you, as it were, a partial report of the financial condition.

The expenses during the season have pretty closely followed up the income, so that when I left home the other day there was \$373.00 in the treasury.

Then there is our Annual Report to be looked after, and our reporter, here, \$125.00, so that it is going to be a "close call" unless there are a number of renewals.

I find with regard to the expenses, cut them as close as I possibly can, it is almost impossible to do anything on that fifty-cent rate of dues; this is not sufficient, and I am glad indeed that our constitution committee have taken this matter into consideration. If we advance as we ought, our dues certainly should be enough so that we may have something to do with.

There was one other feature which I learn is not popular among our members that I hoped would be of some value, that is, a mutual help one to the other: If one of our members has more honey than his home market would support (and by all means **never forget the home market**) he should make it known to the Manager, who would put it on the Information Bureau list—"Honey for Sale;" and then when somebody else has not enough honey for the home market, I would have a list of those who have honey to sell and those who want to buy. This brings the producer and the man who wants it directly together; but for some reason I cannot instil the ideas into our membership in this regard that I desire; it does not meet with the response that I expected.

But the general plan seems to be more of a systematic one, with parties in the field to look after the sales.

Pres. York—Are there any questions any one would like to ask General Manager France? If so it would be a good time now.

Dr. Phillips—I would like to say a word in regard to one of the features Mr. France mentioned. I think of all the complaints we receive there are none that are more abundant than that the bees are being killed by the

spraying of fruit-trees while they are in bloom. There is no question but what if the bees are fed poison they will be killed, but there is a very serious question whether they are being killed by spraying of fruit trees. Last year and this, every complaint that has come to our office has come from regions where European foul brood exists, and, where we have been able to run the case down, the real cause of the trouble has been brood-disease. Bee-keepers have been misinformed about bees being killed by spraying. While it is possible for bees to be killed by spraying, I don't know whether it is true; it may be possible the majority of bee-keepers who believe that to be the case are mistaken, and that the real cause is in the brood disease; and if we could get them to look at their brood first before looking for some other cause of complaint, we would have accomplished a great deal of good.

Mr. Poore—In regard to bees bothering the carpenters: I was building my house; we were putting on the shingles, and every time we would go up there to hammer, the bees would come after us. They said that I would have to get up there; I did so, and invariably when I had my hands engaged, the bees would give it to me in the face; but after a rain came, and we had a flow of nectar, they didn't seem to bother about that hammer.

Mr. Hoffman—Is it not a fact that when you spray an open bloom the poison would get on that and would cause the death of bees? It looks to me as though spraying an open bloom is going to poison the bees. Bees cannot live on poison; it will kill them; it will kill hogs.

Pres. York—The question is whether there would be sufficient poison.

Dr. Phillips—In the first place, it has not been proven that bees will work on poisoned bloom; in the second place, no entomologist in the United States recommends spraying of fruit-trees while in bloom; farmers and fruit-growers follow instructions given them; spraying of fruit-trees when in bloom is a rare occurrence.

Pres. York—I have understood that spraying when in bloom is a damage to the blossom.

Mr. Hoffman—Why it is that most of the horticulturists recommend

spraying before and after; they say themselves that if you spray the open bloom it is detrimental to the fruit; if that poison will kill the bloom, why won't it kill the bees?

Mr. Poore—A bee-keeper told me yesterday of his bees spreading blight, and he said, "I thought I would spray my trees." It is absolute folly to think that bees spread blight. Why, in this Northern climate, the only salvation the fruit-growers have for their fruit is bees. Down in the middle part of the States, there is an orchard where the apples were all on the west side of the tree; during the pollenization season there was a strong east wind, and the bees could work only on the sheltered side of the tree, and there is where all the apples were. The idea of any fruitgrower thinking that bees are injurious to the trees.

Mr. Wilcox—It has been said that no one knows what the apple blight is. Now that matter was fully explained and illustrated before the Wisconsin State Horticultural Society by a man from New York, that the blight is a disease on the body of the tree, and any experienced apple-grower can distinguish it; if you see first the branches turning black, it is true positively that the disease is located there, and from there it goes into the atmosphere. He claims that in order to eradicate it you must destroy all the diseased trees for a considerable distance around. I believe it is thoroughly understood by those men who have given it study, that the disease is located there and from there it goes into the atmosphere, and I believe if you will follow their directions you will get rid of it entirely.

The Secretary's Report.

Pres. York—We will have the Secretary's report next.

Sec. Tyrrell—You will all like my report because it is short; I have nothing really to report. At the time I was elected secretary I was unable to be in attendance at the convention at Albany on account of my duties as field-manager for the Ancient Order of Gleaners, a farmers' organization, and my connection with that order has in a measure made it impossible for me to do the things I should have liked to do for the National. But the big-

gest obstacle was not the time, but when I got settled down to figure out what to do I could not figure out what the real thing was that I should put forth. My intention was to inaugurate a campaign for new members; I went so far as to get the consent of the Board of Directors to allow me to spend \$100.00 in a campaign for new members. My duties with my regular work, together with my inability to find out what sort of a reason I would give to prospective members as to why they should join the National, coupled with the fact that there was a plan under way to reorganize—and even if I could get a new member this convention might upset all the arguments I gave him—caused me to neglect that campaign; so I got up a circular letter which General Manager France sent out with his report, and which was responded to by the members to the extent of furnishing me 2500 to 3000 names of prospective members of the Association, and I am a little doubtful but that there are a good many of those names that were furnished me who are members now.

So that, so far as an active campaign has been concerned, your Secretary has done nothing during the past year.

Then, in the way of a program. I have the program that is before you, and that practically tells you what I have done.

We hope that the question that is coming up this afternoon, of reorganization—the new Constitution—may mean a great deal to the Convention, so that whoever your officers are next year, they may go on and do some of the things we ought to have done.

We did not have a proper organization of the society; we were handicapped; so that if we can offer that as an excuse, that would really tell you why your Secretary has accomplished practically nothing during the past year.

Pres. York—The next two numbers on the program are, "Shall the National be one separate association, or an aggregation of smaller ones?" and "The New Constitution and By-laws." We will have to pass these until the Chairman of the Committee on Constitution is here; I think his report would cover those two topics, and then we can discuss them better.

The Annual Convention Report.

Pres. York—The next subject is, "Publication of the Annual Convention Report—Is Any Change Desirable?"

Sec. Tyrrell—There is something that needs some thought. We have been getting out an Annual Report each year of this Convention of these annual meetings; they are valued by many bee-keepers; by others they are not. The stenographer takes notes of everything that is being said, and it will be published in an Annual Report; a great deal of discussion comes up in a convention that is probably worthless to the average bee-keeper. I sometimes wonder if we are not a little bit under restraint when we know we are being reported, and whether it does not act as a barrier to really free expression and discussion among the members. The cost of getting up the Annual Report is pretty large, and is the value of the report worth the cost?

I am going to ask Mr. France to tell us what he thinks about this Annual Report. We have come to the time when we must do away with ideas, thoughts, and desires, and get down to real benefits that we are going to get out of the money that we are putting in.

Mr. France—In order to reduce the price of the printing bill, I submitted bids, thinking that that would be the most desirable thing to do looking towards the saving of funds. As our Secretary says, our Annual Report costs us more than all else; it runs from \$100.00 to \$130.00 every year for the reporter; then, there is the printing and the postage, which comes in the neighborhood of from \$500.00 to \$700.00 a year; so that it will reach well toward a thousand dollars, all told, to get that report.

If, instead of having a large book, with much in it that many of our members don't want, that money could be put into something of more value to the members by having it published in a different way, say, monthly or quarterly, as you see fit; then the rate of postage would be reduced, which would save on postage, which is quite an item.

For three different years I sent with the Report a request to each member that he send back to me the number of colonies that he has; the amount of comb and extracted honey produced.

If it was a good year, and he had a good crop, he would make a report, and if it was a year like 1911, not 10 per cent would reply; so I have asked to drop that, as it costs us \$75.00 additional expense to put that in the Report.

I felt like cutting out a whole lot more of the Report, yet I was not in a position to do this, and so we have a great many pages of superfluous printing. I solicited some back pages of advertising to help cut down the cost of the book.

I am not in sympathy with continuing the Annual Reports as they have been published heretofore, although there is in those reports much that is considered worth its value for the dues that are paid—50 cents dues for a majority, and then we send the book and pay the postage on it—it costs nearly 50 cents, and they get it back.

Dr. Leonard—As long as this Association is run on the basis that it has been, and is now, what it will be after today is another matter; but as long as it is run as it is now, these Reports are of very great importance to all except those that are here. The members that belong to this Association want to know what goes on here. They are not here to listen; they only know through these Reports what is being done and said, and it is no more than fair that they should have these Reports. I think myself that the Reports can be cut down very much; there is a lot of material in it that is of no consequence, and the General Manager should appoint a committee of two or three of the officers—the President, Secretary, and General Manager—to revise and edit these notes, and not print all of the matter—print just what is pertinent to the subject, and give every man due credit for what he says, but edit the matter and see that these Reports are not so cumbersome.

Still, as the meetings are conducted now, I think that the Report is really worth almost the cost of membership; it is really an important matter.

Mr. Palmer—It seems to me the suggestion of Mr. France that we may have something sent out to the members oftener than once a year—perhaps have a quarterly or monthly bulletin sent out—is an excellent idea. Those of us who have anything to do with soliciting membership dues find a

large number of bee-keepers want to know what they get for their money, and when we tell them they are joining the National Association when they pay their dues to our local society, and that they will get a copy of the Annual Report—if we could, instead, say that they would get a paper that is issued monthly, it will count a great deal more with them, and we could get a record of these proceedings before them in installments; papers could be presented along through the year, so far as the Secretary who has it in charge would have the time to give it.

It seems to me that seasonable articles sent to amateur bee-keepers once a month would be a very helpful thing in our management of affairs; the average bee-keeper needs it, and the amateur bee-keeper needs instruction, and I believe whoever is in charge of this could send out something that is seasonable, that would help the amateur bee-keepers very much, and it would not cost as much, sending this information quarterly, as does this Annual Report, and would be worth ten times more to the bee-keepers and they would see that they were getting something for their money. I believe the bee-keepers would say, "I am getting five or ten times as much for my money in that form as under the present arrangement."

I think the suggestion of our General Manager of issuing a publication oftener than once a year is the thing to do; I am in favor of it.

Mr. Kimball—Mr. Palmer has said practically what I had in mind, and what has been said by Dr. Leonard. I believe in an abridged form of Report, and as our General Manager has suggested, instead of it being an Annual Report, which will require so much postage, that it be issued monthly or quarterly, and also, probably with our change of constitution, much more printed matter will be necessary to send to the different members of the Association under the new organization, and this can be placed in this periodical. As has been suggested, this more frequent communication between the National organization and its members is going to bring us closer together and create a greater interest in our organization and help to make it much more effective.

Dr. Phillips—The fact that the President and Secretary are both editors of bee journals, they cannot say what they think. I don't think the National Bee-Keepers' Association ought to run into the lines of a bee journal; and if this plan of sending out monthly or quarterly publications were to go through, it would practically constitute a bee journal.

If this organization gets powerful enough some time, and gets financial backing sufficient, it may be that we can start an official organ, and it might be worth while; at the present time I should be opposed to that; nothing could be gotten out, with the present funds, which would be a credit to this Association. We don't want to go into any more publicity work until we can do it right.

There are organizations in this country which on a dollar membership are sending out a magazine, monthly or quarterly, and a book of proceedings at the end of the year; but this Association has not enough members to do that yet, and I should be very much opposed to anything which would make it appear that the National is going to start a cheap little bee-journal.

W. E. Krause—I consider the report worth \$1.00 to me. This is the first time I have been to a National convention and I always read the Report; it is a fine thing for those who cannot come. I would like to have a full report; and I don't believe in cutting it down at all; and if we cannot have the Report for what we are paying now, let us pay more dues.

Pres. York—I don't think it is an easy matter to edit a Report; if you cut out what one man says, and leave in what another says, some one is bound to feel offended. It is difficult sometimes to know just what to leave out; that really takes some work, and a person cannot afford to give the time to it; it would take a number of days; in fact, some of the paragraphs should be re-written.

In sending quarterly reports, if you send the same quantity of report, you would have about the same amount of postage—in fact you would have more postage.

M. M. Rice (Wisconsin)—I believe we would have a better attendance at our conventions if this Report was not sent out; a good many think they can

remain at home and read the Report when it is sent to them.

L. V. Rodecker (Minnesota)—Would it not cost a good deal more money to have four reports sent out, in the way of binding, than to put it under one cover?

Sec. Tyrrell—Let us take a vote and see how many want the Report—how much we value it. How many, first, are members of the National Association?

(Practically all.)

How many were in attendance at the last National Association?

(Six.)

Of the balance, how many of you read all of the last Report clear through?

(Mostly all.)

Mr. Hoffman—I am a subscriber to nearly all the bee-journals, yet there is a great deal being said in the National convention that, could I not be present, I would like to get; I think it is possible to raise the dues and get out an Annual Report.

Fred A. Krause—I think if we cannot afford a Report out of the funds we have, we would better raise our dues. If we can't do that we might as well quit. I consider that a Report is worth \$1.00 to me, because this is the first well quit. I consider a Report is worth time I have been to a National convention, and other years when the convention was at a distance, I could hardly afford to go, and I was anxious to get the Report because I felt it was nearly as good as being there, to read the Report, and I would be willing, for one, to pay more dues if it were necessary. I think our dues are little enough.

Mr. Dadant—The intention is to make a change what we think would be an improvement in the constitution. We expect to become of more importance to the bee-keeping public. It seems to me the Report will always be of more or less value. I could not raise my hand when you asked those to raise their hands who had read all the last Report, because I did not read it all the way through, and yet I do want to run through the Report and see what has been done; read the messages that would seem to be of interest. If there were no Report I should think a great many of our members would think the National convention is

dead. I think there ought to be a Report, and if we get into the business more extensively we will need a Report much more than we do today.

Sec. Tyrrell—I think we are all agreed that we want a Report; it is not a question whether or not we have a Report—but is there any change desirable? Are we not getting too much in our Reports? Can we not boil down some of it?

E. E. Townsend (Iowa)—Are not these reports published in the bee-journals?

Pres. York—No; the bee-papers would not have room for them. The American Bee Journal used to publish them in full.

P. B. Ramer (Minnesota)—As Secretary of our Fillmore County Association, in soliciting members I find that this Report helps us to get members, and I know of a good many members that depend on the Report, and when it comes to doing away with it in order to force the people to come here, we cannot do it; a good many men are busy; I expected to meet two or three persons here, but they are not here. You cannot always be here, but if we can promise a Report of something of interest, I know these Reports are read; I have friends, bee-keepers, who read them and are interested in them. I don't exactly agree with one of the members that the monthly report will tell us something seasonable to do, and is therefore of value; if this Report can be mailed by the Secretary quarterly, cheaper, all right; but I would not be in favor of doing away with the Report.

Mr. Wilcox—I wanted to ask Dr. Phillips, particularly, if there is any way by which portions of the proceedings, it being a National association, could be incorporated in publications of the Agricultural Department at the expense of the government.

Dr. Phillips—That has been done in certain associations in the past, but discontinued for all associations excepting the Association of the Official Agricultural Chemists, and since their work is so clearly related to the druggists that has been continued.

Mr. Kimball—Could not this be better settled after the passage of the Constitution?

E. E. Townsend—Why would it not be a good plan to have it arranged in

this way, so that every member wishing this Report could notify the Secretary early enough so that a certain amount of printing would not be necessary; only printing the number of copies desired by the members?

Pres. York—How many here appreciate the Report? Raise your hands. That is almost unanimous. Supposing this to be a fair representation of the membership of the Association, they would practically all want it.

Mr. Muth—If the Minnesota State Bee-Keepers' Association dues are \$1.25, and the National Bee-Keepers' Association's dues are \$1.00, and we know that the Association cannot give us a Report, because they cannot afford to, why not raise the dues to \$2.00? That is not much; and then you get something worth while. Our reports are fine, and \$2.00 is not much for a National Association, when you are going to enjoy the benefit such as are promised—why, \$2.00 is cheap!

Mr. Rodecker—The annual dues of our Minnesota Bee-Keepers' Association are \$1.25; 50 cents goes to us; 50 cents to the National, and 25 cents apiece is our annual dues for the Minnesota State Agricultural and Horticultural Society; we get monthly reports from the latter organization, and also their annual report.

Pres. York—A lot of this discussion would come up under the Constitution.

Mr. B. T. Thompson (Wisconsin)—I wanted to say that we are trying to get something for nothing. I am with the rest of them.

National Association Bulletins.

Pres York—The next on the program is No. 7, "National Association Bulletins; What They Have Accomplished."

Sec. Tyrrell—I think I will have to call on Mr. France, for he is really the only man who knows what has been done. I think he has, in a measure, answered that question.

Mr. France—It is pretty hard to say what they have accomplished. I have had many letters from members who said that the Report was worth more than the dues. In that case it has accomplished its objects; many of the State libraries have asked for copies of the Report. But how much the publication of the Report has accomplished, you know perhaps as well as I do.

Pres. York—What benefit have the bulletins been to you?

Mr. Kimball—I can give an individual experience. I have received some of those bulletins, giving me the firm names of some firms of whom I could purchase tin cans, and the name of an Illinois Glass Company, where I could get glass jars, and I found the information was just what I needed. I have continued throughout the year to buy from some of these parties.

G. E. Bacon (Wisconsin)—I think the bulletins are a fine thing. Almost every day we (G. B. Lewis Co.) have requests from our customers as to who has honey to sell, who wants to buy honey, and who has bees for sale, and who would like to buy bees. These bulletins are a splendid thing, not only for us at Watertown, but for the individual bee-keepers. It is a splendid thing for us; these bulletins put a buyer in touch with the seller. Lots of times I don't know who has bees for sale, or who wants to buy; so by means of these bulletins I can put these parties in touch with each other.

Mr. Ramer (Minnesota)—I appreciate them. I notice everything there is in them; they have been quite valuable to me. I think in the future I will appreciate them even more.

Pres. York—The Secretary has some letters to read.

Sec. Tyrrell—I have a letter from Facey, of Minnesota, to Pres. George W. York, as follows:

Letter from Mr. Facey.

Preston, Minn., Aug. 22, 1911.

Mr. George W. York, President, Chicago, Ill.

My Dear Mr. York:—The time of our National Convention is nearly at hand. I have promised myself that I would most surely be there, but it almost seems now as if I cannot be present. I notice by the program that some questions of far-reaching importance will be taken up. In the consideration of these questions the field of the National, as well as its relation to bee-keepers, should be considered. The National Bee-Keepers' Association of the past has a proud record. The perfection of their union; their absolute sense of justice; their fidelity in upholding the rights of bee-keepers, have repeatedly safeguarded their rights, and enforced the respect of the courts of our land. It is this moral strength combined with the absolute fidelity of

our officers that have constituted our strength.

This is an age of progress. We either have to go forward or fall behind our times, but progress cannot be secure of the expense of the foundation. Are we in danger of this? Generally, no, but if engaged in the honey-business, I would say, yes.

For the National Association to enter into the honey-business, co-operatively or otherwise, would be to weaken their moral strength, and to that extent lessen their effectiveness in safeguarding the rights and interests of their members in particular, as well as that of the entire body of bee-keepers of our country.

Our officers in the past have been exceptionally worthy and faithful; but, in spite of that fact, we bee-keepers are human, and sooner or later men might be placed in power who might do our Association irretrievable injury. Can we do nothing to promote our sales? To this I would answer, yes, emphatically so. In this line the National Association Bulletins have done good work by getting buyer and seller together. My observation has been that they secure prompt sales at good prices. The way is also open for a great work in the way of a National campaign of education concerning the value and use of honey. Nearly all journals and publications welcome such contributions, if written for the information of their readers, and not for advertisement. Information of this kind is advertising of the most effective kind, but it is, and should be, for the bee-keepers in general, and not for the writer. We also need a campaign amongst bee-keepers for some marketing.

In the program following the Secretary's report the question is asked, "Shall the National be one separate organization, or an aggregation of smaller ones?" It seems to me that for the National to be an aggregation of smaller ones would be to weaken the unity of their action. Four thousand and more members working as one body have a much greater effectiveness than a hundred thousand with less unity. These aggregated bodies would sometimes lack cohesion, and would at no time have the unified force of the National. However, a great deal of good may be effected by a campaign for the extension of the National.

With best wishes that the Convention may be a great success, I remain,

Yours truly,

M. V. FACEY.

Sec. Tyrrell—By way of explanation. Unfortunately I did not make myself clear in that division just mentioned, "Shall the National Association be one separate association, or an aggregation of smaller ones?" Mr. Facey has replied in the affirmative. The idea was, not that this aggregation would be an aggregation of separate bodies, but simply one association with its various branches, and with their delegated power coming through the National to transact business. Just now we are no different from any other association, but, with an aggregation, we would have branches all over the country, and I did not make my meaning clear, unfortunately.

Next Place of Meeting.

Pres. York—This is the business session, and here would properly come our invitations for the next meeting. We might consider invitations now from any of the States for our next meeting.

Sec. Tyrrell then read two letters inviting the National to Cincinnati for its next meeting.

Mr. France—There is a telegram here from the Chicago Association of Commerce, cordially inviting the next annual meeting in Chicago. And, also, there are three letters from Canada, asking for the annual meeting to be at Toronto during the time of their great exposition.

Mr. Muth—I hope you will give Cincinnati's invitation consideration. We need the National Convention down towards Kentucky and Tennessee; there are a number of bee-men in that part of the country. For instance, if we had the Convention in Cincinnati, I will guarantee you will have more in any one of your Convention meetings than you have here this morning. The people in Tennessee are anxious that the Convention be held in the South; in fact, they are very much disappointed because they have been "turned down" for another meeting up North, and they feel as if you did not care for the members down South. For that reason I appeal to the Executive Committee to give the South your consideration; even though they have not so

many members, it pays to cultivate those members down there; and you will get more new members than up around Canada.

They are telling me down in Cincinnati, the Commercial Association of real business men—bankers, and pushers—that they will furnish us the finest auditorium to hold our Convention in, and say, it is the best outside of New York and Philadelphia—all free—and trolley rides, and everything to give us a good time.

Mr. Kimball—If it be in order, I would move that we recommend to the Executive Committee—Cincinnati as the place for our meeting for 1912.

Harry Lathrop (Wisconsin)—I second that; I had the pleasure of going to Cincinnati on April 1st.

The motion was put, and unanimously carried.

Pres. York—The Question Box is in order now. Are there any questions you would like to ask?

Helping the National Grow.

Mr. Bacon—It occurred to me this morning that the best way to put the National Bee-Keepers' Association on a better financial basis, and to make this work more effective, as our Secretary says, we must increase our members; that is the only way to do it; that is going to make the expense per capita less, and it is the only way that the Association will ever be a great power in the United States. I have a plan by which I think the Secretary of the National Bee-Keepers' Association can reach every possible bee-keeper in the United States without a cent of expense, as far as the mailing is concerned. Of course, the expense attendant to getting out the literature would be something, but it would be very little compared with the expense of the mailing of this literature through the regular channels.

I think that every bee-supply dealer, every honey-dealer, and every queen-breeder, would be glad to co-operate with the National Bee-Keepers' Association—and why? Because we are all one brotherhood, and, as a representative of the bee-supply manufacturing concerns, we realize your interests are ours. We want to help you while we are helping ourselves, and by co-operation we can all help the National Association.

Now, I think every one of these

people whom I mentioned a few minutes ago would be very glad to enclose, with their annual catalogue, or with their price lists, a strong letter gotten out to the individual bee-keeper. There are nearly a million bee-keepers in the United States, and, just think, this is a National Convention, and it is all you can do to get three hundred members out of the membership; that shows that there are bee-keepers in the United States who do not know about this Association.

If you bring before them a strong letter showing what they are going to get for their money, and that it is to their interest to join this Association, they are going to come in here, and we will be put on a better financial basis, and in a general way the Association will become more effective.

Now with the help of our distributors, as manufacturers I can guarantee that we will reach over 100,000 people by that letter. We have said repeatedly to the Wisconsin State Association that we would send out any literature with our mailing list, if the postage on our catalog would take that literature.

I don't know of any bee-keepers' supply man, or manufacturer, who would not be glad to co-operate in this way.

Pres. York—I am sure every manufacturer and dealer would be very glad to put in a letter from this organization telling about its advantages, as soon as we have some more advantages to offer; that would help to advertise the Association and increase the membership.

Resolutions, I believe, are now ready.

Dr. Gates—Mr. President, the Committee on Resolutions reports:

RESOLVED, That we express to the local bee-keepers and to the city authorities of this city our appreciation of their efforts to make our stay in this city pleasant.

Resolved, That in the death of Mr. W. Z. Hutchinson and Mr. George E. Hilton, former officers of this Association, the organization has lost two men whose efforts have been invaluable to the members of the Association and to bee-keepers at large; and

Resolved, That we tender to the families of these men our sincere sympathy and express to them our feeling of great loss in the death of these former officers.

Resolved, That this Convention of the National Bee-Keepers' Association congratulate Dr. C. C. Miller on completing his 80th year, and express to him their appreciation of the great good which we have received from his efforts, and the inspiration which we have experienced from his writing.

Resolved, That the thanks of the Association be tendered to the General Manager, Mr. N. E. France, for his indefatigable efforts on behalf of the members.

Resolved, That this Convention of the National Bee-Keepers' Association send greeting to the International Congress of Apiculture to be held in Turpin, Italy, in September, and that the Secretary is requested to express to the Congress our wishes that the coming congress be a pleasant and profitable one.

Resolved, That it is the sense of this Convention that there should be a Federal law governing the interstate shipments of diseased colonies of bees and bee-products, similar to their Federal control of live stock diseases.

Resolved, That the appropriation for the bee-keeping work in the National Bureau of Entomology should be increased so that a more thorough campaign may be conducted against the brood-diseases of bees, and for other much needed work for the benefit of the industry.

Resolved, That the committee of three be appointed by the President to act as a National Legislation Committee, to present these matters to the National Congress, and to urge that proper legislation be enacted to carry out the spirit of these resolutions.

Resolved, That the Board of Directors be requested to have the Secretary write each member of the National House of Representatives informing him where in his district brood-diseases have been found by the Bureau of Entomology, and requesting him to send each bee-keeper in the infected area a copy of Farmers' Bulletin 442 of the United States Department of Agriculture, and any other available publications of benefit to bee-keepers.

Resolved, That the Board of Directors of this Association be requested to prepare and send out posters to the post-office in the territory where brood-diseases have been located by

the National bureau of Entomology, calling attention to the presence of diseases, and urging bee-keepers to send to the proper State and National officers for information on the subject. In this notice the aim of this Association should be stated and all bee-keepers be urged to join.

Resolved, That the Board of Directors be asked to take steps to have Departments relating to bee-keeping instituted in the various agricultural papers of the United States and Canada, so that the thousands of bee-keepers who do not read the established bee-keepers may be informed concerning the recent developments in bee-keeping, and that an effort be made to have these departments conducted by well-informed bee-keepers.

Resolved, That the Agricultural Colleges, Experiment Stations and management of Farmers' Institutes be urged to aid in the spread of information concerning improved bee-keeping methods and that the Board of Directors of this Association is asked to communicate with these agencies on this subject.

Respectfully submitted,

Committee on Resolutions,

B. N. GATES, Chairman.

It was moved and seconded that the Resolutions as read by the Chairman of the Committee be adopted as read. Carried.

Pres. York—I would suggest that the Committee on Nominations have a meeting at once so that they may be able to report this afternoon.

Pres. York—I will appoint on that Committee, also, Mr. L. A. Syveraud, of S. Dakota. We will continue the business session into the afternoon. Are there any other matters you would like to bring up at this morning's session?

Adulteration of Honey.

Mr. Kimball—I would suggest that the topic on the program for this afternoon, "Adulteration of Honey. To what extent it is being practiced? What can be done to stop it?"—might be considered at this time.

Sec. Tyrrell—I would not have put that topic in, only from the fact that I received a letter from one of our members saying that there was a great deal of adulteration in his terri-

tory. I forgot now the State he was from; I expected he would be here to take that up, but unfortunately he is not. I didn't know that there was much adulteration being done.

Pres. York—I might say I think that the pure food law is being enforced so well in Illinois, that there is practically no adulterated honey on the Chicago market.

Sec. Tyrrell—We don't find any in Detroit any more.

Pres. York—Some years ago, when we had a test case in Chicago the Association helped us to find that out of thirty samples, 2-3 were adulterated; but that was some ten years ago.

Mr. Rodecker—I was just going to say that I happened to notice in a store in St. Paul, some honey on the shelf which looked very attractive, which was marked "Adulterated." It was sold under those conditions; and the same party had pure honey which he sold for 5 cents more than the adulterated.

Pres. York—I suppose that was all right, if it was properly labeled; if any one wanted to buy adulterated honey he could do so, knowing what kind of an article he was receiving.

Mr. Kimball—The question occurs to me, then, if people will buy adulterated honey, why not put out on the market sugar and honey mixed, and so state; perhaps it would be sold as readily as honey is sold.

Mr. Rodecker—I suppose in labeling it "Adulterated," it comes under the pure food law, and, you cannot do anything with them. What can be done to stop putting adulterated honey on the market instead of the real article, and in place of honey?

Mr. France—If you have any suspicions to that effect, make it known to the Pure Food commission. You must label anything that is not pure honey; it must be labeled, what it is.

Mr. Kimball—What would you call honey—would honey-dew be called honey?

Mr. Rodecker—Would honey-dew come under the pure food law as pure honey?

Mr. France—Honey-dew does not come up to the test of pure honey under chemical analysis, a small per cent is not noticeable, but it is a risky proposition to sell it as pure honey.

Mr. Heuring (Minnesota) — How

would a bee-keeper know whether there was enough honey-dew in it to make it adulterated?

Pres. York—Have a chemist analyze it.

Mr. Rodecker—What would a person do if his sections were capped over and filled with honey-dew?

Mr. France—It would have to be analyzed; that would be the only way to prove it.

Mr. Heuring—Would it not be probable that one section would show more honey-dew than another?

Pres. York—I think our pure food laws are doing good work. The passage and the enactment of the pure food laws have helped bee-keepers, I am sure.

Mr. Kimball—The question has often occurred to me, and perhaps it has to some others here, and they may know how to solve it. After honey-dew has once candied and we reliquefy it, we notice quite a froth or scum rises to the surface; I would like to know in this reheating and raising to the surface of this froth, if there is a chemical change in the honey. I notice the flavor changes somewhat. Some have complained of extracted honey that they don't like it because it is too sweet. They might mix it with water if they wanted it for their own use; but the question in regard to whether there is a chemical change I would like to know about.

On motion, the convention adjourned to meet at 1:30 p. m.

SECOND DAY—AFTERNOON SESSION.

Pres. York—I think we are ready now to listen again to the Committee on Constitution and Resolutions; we had the resolutions before dinner, and are to take up now the report on Constitution.

Dr. Gates, Chairman of the committee, then read the following proposed new constitution:

CONSTITUTION OF THE NATIONAL BEE-KEEPERS' ASSOCIATION.

ARTICLE I.—Name.

This organization shall be known as the National Bee-Keepers' Association.

ARTICLE II.—Object.

The object of this association shall be to aid its members in the business of bee-keeping; to help in the sale of their honey and beeswax, and to promote the interest of bee-keepers in any other direction decided upon by the Board of Directors.

ARTICLE III.—Plan of Organization:

This organization shall consist of one central organization with its various branches. These branches may be in any locality where twenty-five or more members of the National Association decide to form a branch.

ARTICLE IV.—Membership.

Section 1.—Membership shall be extended to any person interested in bee-keeping, and who is in accord with the purposes and aims of this association. The annual membership fee shall be \$1.50; one-third, or fifty cents, of which shall go into the fund of the local treasury where such a branch is maintained.

Sec. 2.—Whenever a local bee-keepers' association shall decide to unite with this association, it will be received upon payment by the local secretary of one dollar (\$1.00) per member per annum to the secretary; **but all active members of such local association must become members in order to take advantage of this provision.**

Sec. 3.—Membership in the National Association will begin January 1st, each year. Those joining **previous** to September 1st, will be credited paid to January 1st, following. Those uniting after September 1st will be credited paid to one year from January 1st, following.

ARTICLE V.—National Meeting.

Sec. 1.—The National meeting shall consist of delegates duly elected by the various branches. These meetings shall occur during the month of February, the exact date and place to be decided by the Board of Directors.

Sec. 2.—Each Branch shall be entitled to elect one delegate to attend the National meeting, who shall present proper credentials, and, if correct, such delegate shall be entitled to one vote for every fifty members or fraction thereof in his local branch.

Sec. 3.—At the annual meeting the delegates may hold one or more sessions open to bee-keepers for the consideration of such special or general topics as the Board of Directors may decide upon.

ARTICLE VI.—Officers and Duties.

Section 1.—The officers of this association shall be a President, Vice-President, Secretary, and Treasurer, General Manager. These officers shall be elected at each annual meeting of delegates and serve for one year, or until their successors are elected and qualified.

Sec. 2.—The President shall preside at each annual meeting of delegates, and at any special meetings which may be called. He shall also preside at all meetings of Directors and perform any other duties which may devolve upon the presiding officer.

Sec. 3.—The Vice-President shall perform the President's duties in his absence.

Sec. 4.—The Secretary shall keep a record of the proceedings of the annual meeting; maintain a list of all members of the association, with their addresses; collect, receipt and pay over to the Treasurer-General Manager all dues and membership fees; keep a proper record of all business transactions, and perform such other duties as may be required of him by the Association or Directors.

Sec. 5.—The Treasurer-General Manager shall care for the funds of the association, depositing the same in such depository as may be approved by the Directors. He shall also pay such orders coming to him as may bear the signature of the one authorized by the Directors to draw orders.

ARTICLE VII.—Board of Directors and Their Duties.

Section 1.—At each annual meeting of delegates, in addition to the officers named in Article VI., there shall be elected a Board of five Directors. (For the year 1912, the Officers and Board of Directors shall be elected at the regular ballot election of the Association, to serve until their successors are elected by a meeting of delegates.)

Sec. 2.—These Directors shall care for the business of the Association be-

tween the annual meetings. They shall have full supervision of the work of the officers elected; and shall have power to remove from office any Officer or Director not acting in accordance with the Constitution and By-Laws of the Association.

Sec. 3.—The Board of Directors shall decide upon the compensation of the various officers, authorizing the amounts so decided upon to be paid from the general treasury.

Sec. 4.—The Board of Directors shall have power to elect a General Organizer whose duty it shall be to promote the organization of branches throughout the United States and Canada. They shall also decide as to his compensation.

ARTICLE VIII.—Organization of Branches.

Section 1.—Local branches may be established in any locality, but not interfering with a branch already established, whenever the membership in that locality so desires.

Sec. 2.—A local branch shall consist of not less than twenty-five members.

Sec. 3.—A local Bee-Keepers' Association already established, may become a branch by a majority vote of its members, either by mail or at a meeting, and accepting the Constitution and By-Laws of this Association.

ARTICLE IX.—Amendments.

Section 1. This Constitution may be amended at any regular meeting of Delegates by a two-thirds vote of the delegates present and voting, provided that at least ninety days' notice of the proposed amendment be given to the secretaries of the branches.

ARTICLE X.—Rules of Order.

Roberts' Rules of Order shall govern all meetings of both the National and Branch organizations.

Pres. York—You have heard the reading of the proposed constitutions as read by the Chairman of the Committee on Constitution. What method will you proceed with to act upon it?

Mr. Palmer—I move that Dr. Gates read the Constitution section by section, explaining any differences which he regards as material changes, and that the chairman call for objections,

and if none are offered, we proceed with the next section, and if no objections are made as the sections are read, that a vote at the end of the entire reading be taken on a whole.

Pres. York—We understand, of course, at the start, that we are not adopting this Constitution—we are simply recommending it, or approving it for recommendation to the whole membership by mail during the month of November; our present Constitution provides that we must make a move for amendment forty-five days before the month of election; that is the reason we are doing it at this time. If the chairman will read the new constitution, article by article, and section by section, we will take a vote upon it as we go along.

Dr. Gates then read Articles I. and II. and no objection being offered they were declared approved.

ARTICLE III.—Plan of Organization.

This organization shall consist of one central organization with its various Branches. These Branches may be in any locality where twenty-five or more members of the National Association decide to form a Branch.

Mr. Ramer—I am the secretary of an organization we have in our county; we have as high as 35 members, yearly dues \$1.00; half goes to the National; and if a man does not keep his dues paid up he is not considered a member. Some years, when the weather has been bad, our membership has run down to less than twenty; it seems to me that limit of 25 is a little high. For instance in many localities there are not enough bee-keepers interested sufficiently to have an organization, but if you have to have 25 to start with you might not get that number. I just throw that out as something to be considered, whether or not that number is a little high or not.

W. E. Krause—I think the same way; in some places we have only a few bee-keepers. I think I would amend that.

Pres. York—What number would you suggest?

Mr. Krause—I would suggest twelve.

Sec. Tyrrell—The object in putting it to 25 is simply this: If you don't have enough members in your local branch so that when you have a meet-

ing there will be a goodly number present, the branch will be a baby to take care of instead of a builder; however, that does not prevent members of that locality becoming members of the National. But if I can get 25 with me, then we can have a Branch under our Association. It seems to me that would not prevent any one from becoming a member of the National, but would make those fellows hustle and get the 25; then they have enough in their meeting to create enthusiasm.

W. E. Krause—The way I understand it, we have no representation in the National unless we have 25 members. I am in a part of the country where there are only a few bee-keepers, and unless we get that 25 together we cannot have an organization and have any voice in the National.

Pres. York—You can be members of the National, but not of a Branch.

W. E. Krause—But we can't send delegates?

Mr. York—Pretty small organization to send a delegate for twelve.

Sec. Tyrrell—I have had enough experience in taking care of little weak organizations through fraternal lines to know what it means; they don't do anything, just have a few members; they are dead. You have to send some one over there to stir them up and keep them going, and it would thus work out to a large extent in your bee-keepers' organization; you can't have much of an organization if you don't have at least 25 members, because you can't get all the 25 to your meetings; it seems to me that 25 is a small enough number. However, that is "up to" the members.

Mr. Dadant—I would suggest to the members who feel that they will not be represented, that if they will join the National direct they will have a consulting voice in the meetings; they can have their say; if they have not enough near them to form a Branch, nothing prevents them from joining the nearest Branch, and they may have a voice in that Branch. It is difficult for a country as large as the United States to make laws for the different conditions existing from California to Maine, so we have to put up with some difficulties. Twenty-five I would suggest is a small enough number; those who wish to have a voice

should join the nearest possible Branch.

Pres. York—We are glad to have any suggestions, but the majority rules. If you feel that you would like to have things changed, don't hesitate to say so.

Are there any other remarks? If not, all who approve this section say aye. Opposed, no.

The ayes were unanimous.

Mr. Kimball—Is it clearly understood the position of the member who pays into the National organization, or one who has a membership through an auxiliary organization? Does an individual member sending his fee and becoming a member, is he an active member in the sense of voting?

Pres. York—No, not in the sense of voting.

Mr. Kimball—He is something like an associated member, but has the advantage of speech.

Pres. York—The object of this re-organized Association is to have a delegated body; every local Branch has a delegate. If you have an organization of 25, that delegate would have one vote; if you have a membership of 80 or 100, he would have more votes; that suggestion of Mr. Dadant to join the nearest Branch would be a good way to work it.

ARTICLE IV.—Membership.

Section 1. Membership shall be extended to any person interested in bee-keeping and who is in accord with the purposes and aims of this Association. The annual membership fee shall be \$1.50, one-third, or fifty cents, of which shall go into the fund of the local treasury where such a Branch is maintained.

Pres. York—Is there any objection to the method of membership?

W. E. Krause—Then if the dues are \$1.50, and if I belong to a local organization, why, that half dollar goes to the local organization; and if we can't get a local organization, then we are simply out 50 cents.

Pres. York—The \$1.50 would go to the National straight.

W. E. Krause—If it goes to the National, I would not care.

Mr. Palmer—There is only one difficulty that comes up there. It is illustrated by the situation here in Minnesota; we affiliated with the hor-

ticultural societies, pay them 25 cents instead of \$1.00 for each one of our members.

Pres. York—We had the same thing in Illinois at one time.

Mr. Palmer—Suppose some one from Minnesota sends in \$1.50 to the Secretary of the National, and he remits to me as treasurer of the home society 50 cents—I need 75 cents.

Pres. York—You should write to your State members and ask him to sent 25 cents more in order to become a member of the Horticultural Society, if he so desires.

Mr. Palmer—I wish we could pay dues to the National through the auxiliary society.

Sec. Tyrrell—The reason that was put in that way was because we don't want to load down the local secretaries with work they don't want to take voluntarily; they will object to being bothered with dues and receipts; wherever a local branch will do that, it will be the plan to have the fees paid to the local secretary, and the secretary make a remittance, keeping 50 cents for the local Branch. Supposing one of the members of your local Branch remitted \$1.50 to Detroit, if I were National secretary, then 50 cents would be turned back to you for your fee. There is nothing to hinder changing the constitution later if it does not work satisfactorily. You will find that whatever you adopt will require some changes; if it doesn't work one way, why, change it to another. We are trying to make it as easy as we can for all.

Pres. York—If you put in the words, "50 cents of which shall be retained by the local treasurer," then you will have it paid to the local Branch.

Mr. Palmer—Could this be done? The dues shall be \$1.50, but when paid by a local Branch, \$1.00 is sufficient; \$1.00 received from a Branch pays the dues for a member.

Sec. Tyrrell—I can join for \$1.00 if I join through your local Branch.

Mr. Palmer—No, it would be as it is now—50 cents of the money I receive as treasurer goes to the National.

Pres. York—If this goes through, it will be \$1.00. The National dues are \$1.50 when joining direct.

Mr. Palmer—But when received

from the treasurer of a Branch, they are \$1.00.

Sec. Tyrrell — Understand, that Branch is a part of the National.

Mr. Prinzing—I belong to an association in Fillmore County; as I understand it, we have 20,000 bee-keepers, or persons who keep bees, in the State of Minnesota, and we have hardly four score active members in Fillmore county. The reason why I voted "no" to the section just read is, that unless I may form an organization of at least 25 bee-keepers, I cannot be represented in the National Association by a delegate; I would have to join some other branch in order to secure representation in the National.

If I form an organization of less than 25 bee-keepers, it would cost me \$1.50 to join the National, besides the dues to the local branch. I believe that any organization should be progressive—constructive, and not obstructive; but this looks to me as if it were discriminating against those bee-keepers who are located in a sparsely settled district. We have whole counties where, perhaps, there are not 25 bee-keepers, and if I belong to one of these small organizations, I have no representation in the National. However, it costs me more if I belong to a smaller community than a larger, and it looks to me sort of like a discrimination against the little fellow.

I think this Association ought to stand for organization among bee-keepers. We ought to have 10,000 members in our Bee-Keepers' Association in Minnesota. The bee-keeping business has not been touched in this State. We have thousands of acres that are overflowing with nectar, that is going to waste simply because the bee-keepers are not associated with the local Bee-Keepers' Association and the National.

Pres. York—You will have to get them educated; it ought to be easy to get 25, if you have 20,000.

On motion the section was approved.

Section 2—Whenever a local Bee-Keepers' Association shall decide to unite with this Association, it will be received, upon payment by the local Secretary of one dollar (\$1.00) per member per annum to the Secretary; but all active members of such local association must become members in

order to take advantage of this provision.

No objections being offered to Section 2, it was declared approved.

Section 3—Membership of the National Association will begin January 1st, each year. Those joining *previous* to September 1st, will be credited paid to January 1st, following. Those uniting *after* September 1st, will be credited paid up one year from January 1st, following.

Mr. York—I think that is the plan the Michigan Association uses now; it works very well; if there is no objections, it will be approved. It is approved.

Sec. Tyrrell—The idea is to have all memberships expire at the same time.

ARTICLE V.—National Meeting.

Section 1.—The National meeting shall consist of delegates duly elected by the various branches. These meetings shall occur during the month of February, the exact date and place to be decided by the Board of Directors.

Section 2—Each branch shall be entitled to elect one delegate to attend the National meeting, who shall present proper credentials; and, if correct, such delegate shall be entitled to one vote for every 50 members or fraction thereof in his local branch.

Section 3—At the annual meeting the delegates may hold one or more sessions open to bee-keepers for the consideration of such special or general topics as the Board of Directors may decide upon.

Pres. York—Are there any objections to the Sections 1, 2 and 3 of this Article?

Mr. Wilcox—There is an objection, but there is also an argument in favor of it, February is rather a cold month for conventions; we have tried it in Wisconsin; it makes long-distance travel rather unpleasant, and there is no opportunity for seeing the city or friends around about. I would rather prefer, if possible, to hold the conventions in October; but the objections to holding it then are that the officers of the National are just going out of existence, and the new ones have not come in yet.

Pres. York—This annual convention would be made up of delegates hereafter; but all members can attend.

Mr. Wilcox—If we contemplate the

delegates attending only as delegates we will have a small convention.

Pres. York—The object of holding it in February is because it is the best time of the year, and people can get away; bee-keepers are not busy then while there are always objections to holding national conventions in October or earlier.

Sec. Tyrrell—There is one other fact in its favor. We must not lose sight of the fact that all of these Branches have conventions, and we must give them an opportunity to have their conventions at seasonable times of the year, or you won't get your delegation.

Mr. Dadant—I object to the statement Mr. Wilcox has made, that the convention, if a convention of delegates, will be small. If you look at our crowd here outside of Minnesota how many members have we? The members do not come. We expect to make progress; we should not judge the future—but the past; if we went back 30 years we would see a very poor association. The trouble is we older men cannot get ourselves into a realization of the possible future of this Association; it anticipates a larger membership than we have ever had. We ought to have something like 75 delegates from different parts of the United States, where we now have ten or twelve.

Some go because their interests are there, and not so much for bee-culture: but if they go representing the bee-people of their part of the country we will have a much better delegation.

The average bee-keeper can then get as much pleasure and information as today, even if he does not have a voice in active voting on the results that will be passed upon.

Mr. Wilcox—I think I said if this convention is to be composed "only of delegates"; but if it is to be composed of all who attend, then the objections to the date I mentioned will apply.

Mr. Dadant—I understood correctly; I objected to that part of the statement that if it were composed only of delegates **it would be small**; if today there was only one delegate from Minnesota we would have a small convention. That is why I think in the future we will gain by delegates. As to the time, I believe that February is the time when the bee-keepers have the most leisure; they have sold their

honey; the bees are in winter quarters; they are not ready for spring work; October is the time for us to sell; at this time the bees are still storing honey, and most of us can hardly attend.

On motion the Section was approved.

Section 2—Each branch shall be entitled to elect one delegate to attend the National Meeting, who shall present proper credentials, and, if correct, such delegate shall be entitled to one vote for every fifty members or fraction thereof in his branch.

Mr. Palmer—If they have five times as many members, why should they not have five times as many delegates? Their interests ought to be measured a little by the number of delegates; they have ten times as many votes, they should have ten times as much interest as if they had one.

Pres. York—By the time we have a larger membership this probably will be changed; the memberships are all small now, and in two or three years, if a Branch has 500 members they will, I think, change it at that time.

Mr. Palmer—It is a question whether I want to be in convention and have one vote, and my neighbor in the next State have five votes to my one.

W. E. Krause—I think if we are going to take each article and pull it to pieces, we will never accomplish anything; there will be time to do this later, and those things can be changed if necessary.

Sec. Tyrrell—If you put money in a stock company you would have votes according to the number of shares you own.

Mr. Dadant—It struck me that where they had more than 5 members they might have two delegates instead of one; but there is this objection: You can instruct one man who has good brains and knows what you want; if you instruct two or three, they may not all understand; if a Branch knows just how many votes they have they can direct one man and he will do what they desire; if you have 50 shares in the bank you have got 50 times as many votes as the man who has one share—you have 50 times as much interest. It would not do at all for a Branch that has only two members to have as much voice as one that has 100 mem-

bers; I think that under the present conditions, this is as good as we can expect.

Mr. Palmer—I think I will offer a motion in order to give a chance for expression of opinions. I move that instead of the article, as read, it shall read “one delegate for each 50 members or fraction thereof.”

The motion was seconded.

Mr. Dadant—Suppose in Maine you elect three delegates; you will have three times as much expense to go to Chicago, for instance, if there are three delegates than if there were one. Therefore, I believe it is better to put one man in charge of all the votes of the branch; that will not deter the others from coming if they choose, and can afford to pay; but I think it is better for us to arrange it so that the branches will not have to pay for more than one delegate.

A vote being taken, Mr. Palmer's motion was lost. Then the motion passed as it read in the first instance.

Sec. 3.—At the annual meeting the delegates may hold one or more sessions open to bee-keepers for the consideration of such special or general topics as the Board of Directors may decide upon.

No objections being offered this section was declared approved.

ARTICLE VI.—Officers and Duties.

Section 1.—The officers of this Association shall be a President, Vice President, Secretary and Treasurer-General Manager. These officers shall be elected at each annual meeting of delegates, and serve for one year, or until their successors are elected and qualified.

Mr. Kimball—I would like to inquire the duties of the compound office of Treasurer-General Manager.

Pres. York—They are given further on—in Section 5—which Mr. Gates will please read.

Sec. 5.—The Treasurer-General Manager shall care for the funds of the Association, depositing the same in such depository as may be approved by the Directors. He shall also pay such orders coming to him as may bear the signature of the one authorized by the Directors to draw orders.

Mr. Kimball—I don't think there is any “managing” there, any more than belongs to the office of treasurer, there-

fore I would object to the title; I would have it read “treasurer.”

Sec. Tyrrell—We have in our office as general manager a man who has done a world of good for this organization—Mr. N. E. France. We are making a change that is going out before the members without their having a chance to discuss it; if we should say we are abolishing Mr. France's office, in other words, “our general manager is dropped,” and call his office that of treasurer, you don't know what the effect might be; while the title, “general manager,” does not convey a great deal, yet it leaves the office as near like what they were before accustomed to as it is possible to make it. That was brought up before the committee, and it was thoroughly discussed by the committee who had it in charge, and their arguments were good. There is one thing that we must not forget, and that is the work that has been done by our present general manager, and his influence, and what it means to this Association; and it seems to me for the present, at least, we would better leave it just as it is; the name means something, anyway.

Mr. Dadant—I wish to say in drawing a constitution you can never cover all the ground; there are many things that you can't cover. Mr. France has been doing a great deal of work, as he has reported to you, in giving information, in helping people who were in trouble, in helping some people who wanted to sell bees, and people who wanted to buy honey; all this can still be done by the general manager, and is better in his hands. I do believe that the name of general manager is still good, and we will probably keep that part of the work in the hands of the same man as before. We have the best man it is possible to find for that office, and we don't want to give the impression to our folks that we do not want him, because we do.

Mr. Kimball—With that explanation I should not object. Only it seemed to me it was letting Mr. France down a little too easy; we know what good work he has done in the past, and expect him to continue it; we don't want to “clip his wings.”

Mr. Wilcox—This idea that occurs to me: If we have a Treasurer-General Manager who receives all the funds that pass through his hands, the constitution does not provide that he

shall give any bond for the safe keeping, or safe deposit, of that money.

Pres. York—That comes later.

Pres. York—If there is no objection to this Section we will pass on.

Sec. 2.—The President shall preside at each annual meeting of delegates, and at any special meetings which may be called. He shall also preside at all meetings of Directors and perform any other duties which may devolve upon the presiding officer.

Pres. York—Any objection?

W. E. Krause—It says he "shall;" he may be sick.

Pres. York—Any further objection? If not, we will pass on to the next.

Mr. Palmer—Is the president a member of the Board of Directors? If he is not, is it desirable that he shall preside at meetings?

Pres. York—The Directors do the voting; the President has no vote except in case of a tie; and if all the Directors are present there could be no tie, as there are five Directors.

Sec. 3.—The Vice President shall perform the President's duties in his absence.

Sec. 4.—The Secretary shall keep a record of the proceedings of the annual meeting; maintain a list of all members of the Association, with their addresses; collect, receipt and pay over to the Treasurer-General Manager all dues and membership fees; keep a proper record of all business transactions; and perform such other duties as may be required of him by the Association or Directors.

Pres. York—Would anybody like to have him do more than that? I think we approve of those two sections.

Sec. 5.—The Secretary-General Manager shall care for the funds of the Association, depositing the same in such depository as may be approved by the Directors. He shall also pay such orders coming to him as may bear the signature of the one authorized by the Directors to draw orders.

Pres. York—If no objection, that section is approved.

ARTICLE VII.—Board of Directors and Their Duties.

Section 1.—At each annual meeting of delegates, in addition to the officers named in Article VI., there shall be elected a Board of five Directors. (For

the year 1912, the Officers and Board of Directors shall be elected at the regular ballot election of the Association, to serve until their successors are elected by a meeting of delegates).

Mr. Dadant—As the nominations have been made, there are five directors contemplated; if we continue to work under the old constitution, of those five we have nominated two who are now directors, so if five were voted upon the other three would naturally become directors, so you can have five in this way, and three by the old way.

W. E. Krause—Are those five directors elected one year, and the next year five new ones again?

Pres. York—They are all elected annually.

W. E. Krause—It seems to me that would be poor policy; there ought to be some directors held over.

Pres. York—You can re-elect them, if desired.

Mr. France—I was wondering as to the present conditions; whether directors who have been elected until the end of 1914—how are you going to dispose of them?

Dr. Phillips—They were elected under the old constitution.

Mr. Dadant—They would be no longer under that constitution, if this new one is adopted.

Pres. York—If the United States were to adopt a new constitution, and elect new officers, I think President Taft would be out.

Section was approved.

Section 2.—These Directors shall care for the business of the Association between the annual meetings. They shall have full supervision of the work of the officers elected, and shall have power to remove from office any officer or directors not acting in accordance with the Constitution and By-Laws of the Association.

Sec. 3.—The Board of Directors shall decide upon the compensation of the various officers, authorizing the amounts so decided upon to be paid from the general treasury.

Sec. 4.—The Board of Directors shall have power to elect a General Organizer whose duty it shall be to promote the organization of Branches through the United States and Canada. They shall also decide as to his compensation.

No objections being offered to Sec-

tions 2, 3 and 4, they were declared approved.

ARTICLE VIII.—Organization of Branches.

Section 1.—Local Branches may be established in any locality, but not interfering with a Branch already established, whenever the membership in that locality so desires.

Mr. Wilcox—I have a suggestion on that; if we pay back 50 cents of the fee to the local Branches, they disbanding, going out of existence, would it not be well to incorporate that the different property or funds may revert to this Association?

Sec. Tyrrell — The suggestion is good, but I am afraid the moral effect it would have would be bad; the little Branches would be afraid to come in; I am afraid to tack that on just now.

Mr. Dadant—There is another objection to putting anything like that in—you will keep out some State organizations. The Illinois State Association gets an appropriation from the State of Illinois; there are regulations in regard to the use of that fund. They will doubtless become a Branch, provided they are not handicapped in the use of their funds.

Pres. York—The State of Illinois turns over to the State Association \$1,000 a year; if such Branch disbanded I don't think the State of Illinois would stand for turning that \$1,000 a year over to this Association.

Section 1 was then approved.

Sec. 2.—A local Branch shall consist of not less than 25 members.

Sec. 3.—A local bee-keepers' association already established may become a branch by a majority vote of its members, either by mail or at a meeting, and accepting the Constitution and By-Laws of this Association.

Pres. York—There is one thing I would like to suggest regarding the by-laws; as we have no by-laws why could it not read "Accepting the constitution of this Association?"

Sec. Tyrrell—We may have by-laws in the future.

Sections 2 and 3 were approved as read.

ARTICLE IX.—Amendments.

This Constitution may be amended at any regular meeting of delegates

by a two-thirds vote of the delegates present and voting, provided that at least ninety days' notice of the proposed amendment be given to the secretaries of the Branches.

Pres. York—It goes back to the Branches before they can make any change in this constitution, and you can instruct your delegate before he goes to the meeting as to what you wish done.

W. E. Krause—I think that is a pretty large majority—two-thirds vote to make an amendment,—because it might be bad weather, and people could not get there.

Pres. York—It says two-thirds of those present at the meeting.

The Article was then approved.

ARTICLE X.—Rules of Order.

"Robert's Rules of Order" shall govern all meetings of both the National and Branch organization.

Mr. Rodecker—I would omit that last clause; some local association may have "Cushing's Manual."

Sec. Tyrrell—If there is any question of parliamentary law coming up at any time you want to have uniform authority; where it comes to a case of settlement, parliamentary law should be of recognized authority.

Mr. Palmer—That point is all right; I should think it would be covered if you omit that anyhow; any question coming up in the National it would be settled by Robert's Rules of Order. To our local Branches, by that, it would sound as though you would **have to have** Robert's Rules of Order.

Mr. Dadant—It seems to me that if the National has a certain "Rules of Order" the different Branches that have to do with the National should go by the same Rules of Order; in their own meetings they can go by different rules if they want to, but when they deal with the headquarters they ought to go by the same rules as the National.

Sec. Tyrrell—Suppose you have a squabble in your Minnesota Branch over some ruling and you can't settle it among yourselves, you want to take it up with the National; what is the position for you to take? You have to get it before your directors, for instance, they are the supreme authority on these things when it comes to settlement. If you are

allowed to have Cushing, how are they going to decide unless they know what rules govern? If it comes to a point of settlement it has to be settled by supreme officers, and then they have to know what the rules are to settle that dispute; if you are not governed by Robert's Rules, they would say to the National, "That is not what we are working under at all." You have to have uniform recognized authority on parliamentary laws or else your officers are not in position to decide the questions that come up. But it is something that may not come up for a hundred years. This says Robert's Rules of Order shall govern; what do you want another for; what is the matter with Robert's?

Mr. Palmer—Supposing some organization has some other and does not want to change. I don't believe the National should interfere. I believe in Robert's Rules of Order, and I would hate to have the National say, "You have to use Cushing."

Sec. Tyrrell—You have to have some particular rule to work by; if the State associations are going to co-operate with the National, they must be willing to adopt those things that are necessary to make things work harmoniously.

Mr. Kimball—I don't like the sound of it; we might just as well have the National make the constitution for the auxiliary society, as to say you should have such a manual in your meetings; for the National to dictate what Rules of Order shall be used it seems to me it is un-American. I move that the last few words there referring to our local branches be omitted; simply state "Robert's Rules of Order shall apply to the National organization."

The motion was seconded.

Mr. Dadant—If you vote for it that way, as long as the local Branches accept your constitution, they accept it.

Mr. Kimball—The local Branches accept the constitution, but it doesn't mean the local is to accept in its meetings Robert's Rules of Order exactly as the National does.

The motion was put, and lost.

A motion to leave the words in as originally read was carried.

A motion was then made and carried, that "this constitution as finally

approved, section by section, be approved and balloted upon in November."

Pres. York—We are now ready for a report of the Nominating Committee composed of one from each State represented at this meeting.

Mr. Dadant — Your committee has decided to recommend the following nominations; this is like the Constitution, we are not to elect these nominees here, but simply to recommend them to the membership to be voted on in November.

President—George W. York, of Illinois.

Vice-President — Morley Pettit, of Canada.

Secretary—E. B. Tyrrell, of Michigan.

Treasurer and General Manager— N. E. France, of Wisconsin.

For five Directors, two of whom are already directors; three others to become elected if the constitution is changed: E. B. Townsend, of Michigan; Wesley Foster, of Colorado; F. Wilcox, of Wisconsin; J. E. Crane, of Vermont; J. M. Buchanan, of Tennessee.

Pres. York—You have all heard the selections of the nominating committee; what will you do with the nominations?

Mr. Palmer—I move that the report be approved.

The motion was seconded and passed.

Queen-Mating Stations.

Pres. York—We will now proceed with our program. "Mating Stations Conducted by the Government; Would They be Practical?"

Sec. Tyrrell—In one of the late issues of the "Bee-Keepers' Review" there was an article concerning queen-mating stations, and I was in hopes the gentleman would be here, but he did not show up. You have undoubtedly thought of this, the idea being to have conducted in this country a place where queens could be sent for pure mating, this place being conducted by the Government and open to any bee-keeper to insure pure mating of queens. As I understand it, it would be necessary to have enough of those different stations to care for the different races of bees—the Carniolans, the Italians, the

Caucasians, or whatever they might be—to provide for a way of getting purely mated queens at Government expense; they have them, I believe, in Switzerland. Do you want them in the United States?

W. E. Krause—Of course we want it, but we can't get it. We can't get money enough to keep up our associations.

Sec. Tyrrell—This is the Government—the National Government. I think the Government would better spend the money somewhere else—in curing foul brood—is my idea.

Mr. Wilcox—I think the professional queen-breeders should establish these mating stations where necessary; the Government can better use their money in the supervision of contagious diseases.

Mr. Dadant—Such a thing is in existence in Switzerland, and I know of people who are poking fun at them, saying they are wasting the people's money.

Pres. York—It does not seem to be very much favored in this Convention, to have Government mating stations.

Uncapping Melters or Machines.

Pres. York—The next topic is, "Uncapping Melters. Are they Being Used Extensively?" Is there any one here who has had experience with uncapping melters?

Sec. Tyrrell—I meant uncapping machines—steam-heated uncapping knives; are they practical?

Mr. Wilcox—I believe they are very practical; a decidedly good thing.

Mr. Murray—Practical, but not necessary.

Mr. France—I would rather take exception to that last word. There are times when our honey is very thick; take a cool night and a cool day, and you will find either the thin uncapping knife or the beveled-edge Bingham knife quite necessary. One of the great advantages of a steam-heated knife is, you can cut the whole length of the comb; it works so much faster, that last year, for 2 cents a day for kerosene oil, under a little oil stove, it kept our uncapping-knife going all day. I had two of them this year for fear that one might give out, and I would have the other ready. One thing we found, that it makes additional heat in the room, which was an ob-

jection. My son said to me, "Pa, that is a good thing, but it is pretty hot." But he afterwards overcame that difficulty. He made a little box, and put that outside the building, and put the oil stove in it, and bored a hole through the wall just big enough to run the hose through, and it worked fine. The same outfit goes in my out apiary extracting houses.

Mr. Hoffman—I have a steam-heated knife I used one season, and I would not do without it; as to producing moisture, there might be a little, but not enough to do any damage whatever to the honey.

Mr. Murray—They would be a good thing in cool weather, certainly, but I would feel like amending my answer and saying, "Practical, but not necessary generally."

Sec. Tyrrell—The point is, is it a thing we want to adopt? Is it worth its cost? How is it, Mr. France?

Mr. France—I would not be without it if I had to pay more; these steam-heated uncapping knives can be had for \$5.00.

Pres. York—There is the second part of the question, "Uncapping machines—are they being used extensively?" Raise your hands, all who have tried them.

Mr. France—How many have seen it work? (Three.)

Pres. York—I saw the Ferguson uncapping machine, which uncapped six combs in one minute, both sides, and the combs were very even; so it was very nicely done on both sides. Mr. Ferguson is working on the machine yet. I think Mr. France can say something about that.

Mr. France—It is the nearest to perfection of any that I have seen up to the present time. There is one other pattern that has not been given to the general public, and I question if it ever comes to the front; it takes a long time to get the combs to the uniform thickness required. My bees won't learn to keep a uniform thickness.

Pres. York—Educate them!

Mr. Dadant—Mr. Ferguson, when he made his invention, asked us to come to his house and see the machine. We had to select two fine combs; if we took very thick combs, it took out a part, and if we took thin combs, parts would not be uncapped. I suggested to him that the machine would not be

perfect until he had some sort of an arrangement that would allow the knife to follow irregularities of the comb, but he seemed to think it would be better to trim all the combs alike. I could see he was not very enthusiastic over my opinion, because he didn't send a machine, and I think it was because of the objections I raised that he didn't. I don't believe we would want to use it under the present circumstances; but I believe they can be improved so as to be practical.

Sec. Tyrrell—Mr. Ferguson, in his letter to me, said that he had been working on the machine. Mr. Townsend, of Michigan, has used the machine to some extent, and I think he endorses it, but I don't wish to say so positively.

Pres. York — There are several things I feel like saying this afternoon. I have attended our National Convention for the past seventeen years without missing one, and I am pretty sure I am correct in saying that this has been the most orderly of any of them. There has been the least trouble in having members take their seats after recess, and in the general order during discussions. It seems to me everything has gone so smoothly, and it has been a pleasure for me to preside. I want to thank you for your help, as I know you would help me.

Mr. Dadant—Our President is so happy to think we have renominated him, that he is paying us compliments! (Laughter.)

Uniform Shipping-Cases.

Pres. York—We have now gotten down to the sixth number of the miscellaneous program, "Uniform Shipping-Cases."

Sec. Tyrrell—There is one man in the United States who has been advertising, strenuously, uniform shipping-cases—Mr. Frank Rauchfuss, of Colorado. I asked him to be present and take up this matter, but he could not come. I think Mr. Rauchfuss has brought out some splendid points, showing what the Colorado Association is doing with reference to using uniform shipping-cases; there is an article that he has enclosed that appeared in the bee-papers, and I don't know whether you want it read or not, or whether you want to take up the question of uniform shipping-cases.

Can we have uniform shipping-cases? If adopted, what size should they be? And why? When you use different size shipping-cases, and try to put them in one car, you have a proposition on your hands. A uniform case—why is it not as good to use? The article referred to reads as follows:

Uniform Shipping-Cases for Comb Honey.

Uniformity of grading and uniformity of packages of all commodities produced in rural districts and afterwards brought together to be shipped in straight car-load lots to distant market is now being recognized by all shippers, whether individuals or associations, as a matter of prime importance.

In fact, the business in some of these commodities could not possibly have assumed the gigantic proportions that it has, without proper standards of grading and packing that are generally understood by the trade throughout the country. Oranges and lemons are packed in standard size boxes, with grade and size indicated on the end of the box. Apples, cantaloupes, dried fruits, nuts, etc., are all packed in uniform packages, if coming from localities where their production is a matter of some consequence.

It is now only in localities where these commodities are produced in a small way, as a side-line to farming, and considered of little or no consequence, that the matter of grading and packing does not receive the attention that it should.

Bee-culture in Colorado has developed to such a stage that the bulk of the comb honey crop is now marketed in a fairly satisfactory manner; but there is still room for improvement in many quarters as regards proper grading. However, this is a subject outside of the scope of this paper, and I shall confine myself to the matter of packages.

Comb honey is an article that sells much on its appearance, no matter how fine it may be in flavor and body. If stored in poorly made or discolored sections and packed in unattractive cases, it will not bring nearly so good a price as an article of inferior quality but properly handled and packed.

Most of our crop must find an out-

let in the States east of us, and can only be marketed to advantage in car-load lots.

In my capacity as manager of a co-operative association of bee-keepers for the past 12 years, I have had unusual opportunities to study the marketing question from all sides, and have come to the conclusion that the policy of manufacturers of bee-supplies in catering to the whims of individuals for new styles of sections and special cases for the same is ill-advised, and works a hardship on the car-load shipper at the point of production, as well as on the jobber and retailer at its final destination.

What the car-load buyer of comb honey is interested in, principally, is to secure stock that is carefully and conscientiously graded, and packed in attractive cases of uniform size.

Any buyer of experience will gladly pay a little more for such than to take goods of like quality but packed in a number of different sizes of sections and shipping-cases. The reason for this is that it requires less time in loading the car (if bought f. o. b. shipping-point), less risk of damage while in transit, less time to unload at destination, less room occupied in the warehouse, and, last but not least, less trouble in making sales, and better satisfaction to his trade.

A car of comb honey packed in cases of exactly the same outside dimensions (not necessarily of the same manufacture) can be loaded in less than half the time of a car composed of different sizes of cases. If honey is brought in from the apiaries and first stored in a warehouse before being loaded in the car, then the trouble will be aggravated, as different styles of cases must be placed in separate piles.

In order to see if the manufacturers of bee-supplies would be willing to recognize these difficulties, I wrote last fall to several of the largest firms, and am glad to report that they all have shown a desire to come together on a standard outside dimension for 24-section double-tier shipping-cases for $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{7}{8}$ sections, as well as for 24-sections single-tier cases. It is hoped that cases for the coming season's crop will be of uni-

form outside dimensions. The following measurements were suggested:

Specifications for Double-Tier Cases.

Outside dimensions for standard double-cases for $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{7}{8}$ bee-way sections—

13 $\frac{7}{8}$ inches long, 9 $\frac{1}{2}$ high, 8 $\frac{1}{8}$ wide.

Full half-inch lumber for ends.

Full quarter-inch lumber for tops, bottoms and backs. Full $\frac{3}{8}$ -inch lumber for grooved cleats.

3 sheets corrugated paste-board for each case.

2 sheets plain paper for drip-pans.

Plain 2d fine wire nails for nailing covers.

Cement-coated wire nails for balance of case.

Covers printed—"Glass! This Side Up!"

Packed in re-shipping crates.

Specifications for Single-Tier Cases.

Outside dimensions for standard single-tier cases for $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{7}{8}$ bee-way sections—

18 $\frac{1}{4}$ inches long, 12 wide, 5 $\frac{1}{8}$ deep.

Full half-inch lumber for ends.

Full quarter-inch lumber for top, bottom and back.

Full $\frac{3}{8}$ -inch lumber for grooved cleats.

2 sheets corrugated pasteboard for each case.

1 sheet plain paper for drip-pan.

Plain 2d fine wire nails for nailing covers.

Cement-coated nails for balance of case.

Covers printed—"Glass! This Side Up."

Packed in re-shipping cases.

If a discussion on the above standards could be arranged for this convention it might be the means of bringing out some valuable information.

FRANK RAUCHFUSS.

Denver, Colo.

There are a number of questions in connection with uniform shipping-cases. How many ship comb honey—raise your hands. Perhaps a dozen. What do you think about uniform shipping-cases? Do you think it would be a good thing, or not?

Mr. Townsend (Iowa)—It strikes me that to have a uniform shipping-case you will have to use uniform sections.

Pres. York—Would that not be a good thing?

Mr. Townsend — Consequently we would have to adopt a uniform size section as well as a case, as I understand it.

Sec. Tyrrell—Mr. Muth is a man who handles considerable honey, and ought to be able to add something here.

Mr. Muth—If uniform shipping cases, are the right size they are all right; the case that the Colorado people use is the best shipping-case on the market. Of course, if you are using plain sections your cases will be small; some people have 4x5 sections; some people have ideal sections, 3 5-8x5, but if the bee-keepers could only know that the $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ beeway sections is a standard section, then you can get a uniform shipping-case that every one likes. For instance, I received a carlot of comb honey from the west last year, and some were in double-tier shipping-cases holding the $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ sections; some were single-tier shipping-cases, $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ sections, and about half a carload of the cases were $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ plain section.

The other day, quite a number of shipments of honey that I sent out came back, and they said, "Our customers don't want such small cases of honey; they want big double-tier shipping-cases, as adopted by the Colorado Bee-Keepers' Association; they stand shipment better; are easier to handle, and people like them."

Fred A. Krause—How many sections, 24 or 48?

Mr. Muth—Twenty-four, no larger or smaller.

Mr. Rodecker—I run entirely to comb honey, some of my customers want honey put up in the 12-section cases, and some in the 24, but wherever I can sell it I shove on the 30-section case, double-tier, 15 sections on the bottom and 15 on top; these 30 in a case, set up on a grocer's counter, make a very attractive case, and that is what I would recommend, —24 or 30 section case, double-tier.

Sec. Tyrrell—That question is more important than at first would appear. When a man begins to handle honey by carlots, it becomes evident that $\frac{1}{8}$ of an inch on one case does not make much difference, but eight put along together is an inch. The testi-

mony of such a man as Mr. Muth, who is handling this honey, would mean something to us. It seems to me it might be well for this convention to adopt—to recommend the adoption, rather—of a standard shipping-case such as is now being used by the Colorado Association.

Mr. Wilcox—There is a difficulty in the way. Now I have produced and shipped a great deal of comb honey; we have quite a variety of sections, sizes and shapes; if we adopt a uniform section we must commence back at the hive and use the same kind of sections; we can't have uniformity of cases if we do not have uniformity of sections to put in them, because they will have to be all of the same size and shape; there is where the difficulty comes in. It would be a good thing if we could make some improvement, but the question is—How long will it take to accomplish it if we undertake it? We can recommend something and that is all we can do. The 24 double-tier case is a good one; when I was producing 5 to 15 tons of comb honey per year, I had three sizes—24, 48 and 12; 12 for family use was about right; the grocer didn't like it for fear we would sell direct to families.

Pres. York.—Were the 48 double-tier?

Mr. Wilcox—Double-tier.

Pres. York—A pretty heavy case.

Mr. Wilcox—But it shipped just as safely, when properly put up.

Sec. Tyrrell—It would not be understood that this change would be compulsory, or made in a minute. Today we have no recognized standard. If we would say to a new person starting, that the National Convention recommended the adoption of the 24-size shipping-cases, such as are used in Colorado Association, don't you see, you have a certain sized section, and the other States can finally fall in line, and, after a while, all the State could fall in line.

Mr. Wilcox—You are right about the 24-section case.

It was moved and seconded that this Association recommend the adoption of a uniform shipping-case of a double-tier or 24 sections.

Mr. Muth—I offer an amendment. The most practical section for that 24-section case is the $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ bee-

way section. I offer that because amateurs will go wrong in their selection when they begin, if you do not designate this. If you get started right, then you are on the right track, and it will not be so costly.

Mr. Wilcox—He has described the section; I did not; I carefully avoided that.

Pres. York—Would you be willing to accept that?

Mr. Wilcox—I accept it.

Pres. York—That is an addition; it would hardly be an amendment. I think you had better keep that as a second motion.

Pres. York—It is moved and seconded that we recommend the 24-section double-tier shipping-case as the standard shipping-case.

Mr. Syverud—I would also add that we have the same size as the Colorado Association are using.

Mr. Rodecker—I want to know why Mr. Muth says the bee-way section is preferable.

Mr. Muth—I will meet you outside!

Frank Howard—I have been shipping honey for 15 years, and I use 12-lb. shipping-cases. If this motion should be passed, would it bar a man from using any other?

Pres. York—No; we just recommend.

The motion was put and passed.

A Standard Section.

Mr. Muth—I move that the National Bee-Keepers' Association recommend as a standard the 1-lb. section, $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ bee-way section, using separators, and top and bottom starters.

The motion was seconded.

Mr. Muth—There is logic in my madness, if you will accept my explanation. I say bottom starters for the reason that it will stand transportation if it is packed right.

Fred A. Krause—I thought we were talking about sections now, and not foundation and starters!

Mr. Rodecker—I have never used a bee-way section, because I don't think it shows up as well as the plain section.

F. A. Krause—I would like to have Mr. Muth explain why he recommends that section.

Mr. Muth—I am looking towards satisfying the buyer. Suppose you were going into a zoological garden

where there were a lot of monkeys; outside there is a man selling peanuts; one has a small bag and the other a large bag—you would buy the big bag. The $1\frac{1}{8}$ sections require larger size cases, and the retail grocer or consumer always picks the biggest for the least money.

Mr. Rodecker—Then why not recommend the 4x5 section?

Mr. Otto—Does Mr. Muth sell his honey by the case or by the pound?

Mr. Muth—Either way.

Mr. Otto—Do you find any difficulty in selling a small case?

Mr. Muth—Just in the last year or so we have gotten in the habit of selling according to the man we see. We say \$4.00 a case, and if he buys by the pound, we tell him so much a pound; we sell him anyway; and in the same way we buy honey—by the gallon some times; by the can some times; by the pound some times.

Mr. Otto—As far as I am concerned, I object to this Association adopting a certain size section. When I started in the bee-business, I used the bee-way section, but I changed to the plain section. I am now using the $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ plain section. Suppose this Association goes on record as recommending the adoption of the $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ —what would it amount to in the apiaries—to be obliged to use the section the Association recommends in order to have a standard section?

Mr. Fred H. Krause—We have one honey merchant here—Mr. Muth—and I think what he says has considerable weight; although there are quite a few other honey producers in the United States, he is the only one here whose opinion has been given. A number of years ago, when I started into bee-keeping, I expected to make it my business for future years. I have been studying the bee-business ever since I was 17 years old. I finally said I was going to have the best when I started in. Some company was boosting the plain sections—different sizes—but they seemed to recommend the 4x5 plain sections, so I wrote to four or five merchants in Minneapolis, Chicago, and Duluth, and asked them what size sold the best, and whether the 4x5 plain section was sold more than the $4\frac{1}{4}$ bee-way section, and if they would rather have them. They all replied; some said that it didn't make any difference; some said they would a

little rather have the 4x5; that the 4x5 looked the nicest, and I used the 4x5.

Geo. A. Boyum (Minnesota)—I can get more for my honey in the 4x5 sections; I don't see any reason why the National Association should dictate what sort of sections we shall use.

Sec. Tyrrell—The National Association is studying the question to get the best results. In using the 4x5 sections, you and I, as bee-keepers, in picking up that section of honey, will pick it up and not damage it; but the average clerk in a grocery store will shove his fingers right into the comb.

Mr. Muth—That is not the greatest objection. Place 24 double-tier sections of that size in a case, and then you place 24 $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$, and take this little girl here, and say to her, "What box of honey do you want?" Will she grab the smallest one? No, sir. If you want to increase your sales of honey, and the price of honey—we are giving you the benefit of practical experience.

I know, of course, if you have plain sections, you are going to keep them—you have started wrong; the plain sections and fences and separators were made wholly for one reason—that the manufacturer could get more money from you. The manufacturer has you on the wrong track; but we are trying to get you right.

Mr. Boyum—I understand Mr. Muth is a honey-dealer; we are not producing honey for the honey-dealers; we are producing honey for the consumers, and that is a more attractive package; the 4x5 looks dainty, and it is not so thick. I have been told the 4x5 looks bigger than the other kind.

Mr. Muth—Put them in a case for shipping.

Mr. Boyum—For shipping; I agree they will ship better.

Mr. Muth—I am looking for the same man you are looking for—the consumer. That section (meaning section that is shown at Convention by a member, 4x5) was brought into prominence by a man that thought he invented it, and that man paraded around the country and said, "The Danzenbaker section will bring 2 cents a pound more than the other sections," and he made a whole lot of fellows believe it.

Mr. Boyum—It proves itself true. I

am getting 25 cents; the other kinds are selling for a shilling; for 15 cents.

Mr. Muth—Because you demand it; they don't know any better.

Pres. York—You can't get that 25 cents on South Water street, in Chicago. We are talking about uniform shipping-cases for shipping honey in car-lots, by freight.

Mr. Wilcox—The reason why that section looks nicer than the $4\frac{1}{4}$ is not because of its extra height, but the narrower width. Take the $4\frac{1}{4}$ and make it a little narrower with fence separator, and set it up beside that, and it will look just as nice, and be thick enough to weigh just as much. That looks nicer, because it is built with those fence separators; but when you come to handle it in the retail trade, there is much more liability of leakage; hence, the other may not look as nice, but it ships better.

Pres. York—We are talking about adopting a standard section.

Mr. Otto—I think it is true, as Mr. Muth says, the market of Cincinnati may demand that section, but the market of Chicago demands $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ plain section. Mr. York knows that size section goes best in Chicago.

Pres. York—So far as I have seen it, it does not make a bit of difference in Chicago.

Fred A. Krause—If I had it to do over again, I would stick to the $4\frac{1}{4} \times 4\frac{1}{4}$ bee-way section; some local markets may want the 4x5; we must go by what the markets want. If the commission men want a certain kind of section, we want to furnish it, because we want to sell our honey.

Frank Gessner (Minnesota)—I think one of the best sections we have is the $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$.

Pres. York—It has been moved and seconded that this Convention recommend as a standard section, the $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ bee-way—all rise who recommend its adoption.—Twenty-six. All opposed, rise.—Sixteen. The motion is carried.

Mr. Townsend—I want to ask if all these men who voted for the $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ are all comb honey men, or extracted honey men.

Mr. Dadant—I am an extracted honey man, but what is more, we sell sections; we handle them but don't make them. When a man comes to me and wants an odd sized section I

can't always sell it; if he wants to exchange sections, and you have the same size you are all right.

I believe the less difference we have the better off we are; that is the only reason why I voted for the $4\frac{1}{4} \times 4\frac{1}{4}$ section.

Mr. Wilcox—I ask that the record show that the vote was 26 to 16; I want the figures to show so that the reader may judge for himself.

Mr. Boyum—It is all up to the bee-keeper himself, I believe; but why can't we have two standard sections as well as one—the 4×5 and the $4\frac{1}{4} \times 4\frac{1}{4}$? That would be all right.

Mr. Murry—Uniformity is fundamentally desirable; a few years ago we had no uniformity; if we don't make a start in some direction, and recommend what seems to be the best, it appears to me we would never get anywhere.

Mr. Otto—As long as this Association has adopted a standard size of shipping case, or has recommended its adoption, it would be no more than fair and proper that this association adopt a standard package for extracted honey.

Mr. Ramer—I think we are all too much like a set of lawyers—we want to carry our point. I use the plain section; I prefer it; it is easier to clean up. Mr. Selser sent a man to our county to buy some honey; I had a talk with him about the different sections, and he said: "I wish you would all get into the way of using the plain sections."

I am fitted up with plain sections, yet I see the advantage of having everything uniform; if we had everything uniform through the whole business, why, it would be much better for the bee-keeper.

In our town there is a supply dealer who has 7 two-foot sections, and he has several thousands of those on hand; when we all wanted sections—I wanted the plain, another man wanted the bee-way, and there he had several thousand, and they were no good to us. So you see that is a disadvantage.

Although I am in favor of the plain section, yet I would be willing to throw them aside and adopt another, if the majority are using a uniform size.

Standard Can For Extracted Honey.

Mr. Wilcox—I move that—now that we are through with comb honey

that we adopt the five-gallon tin can as a standard package for the wholesale market for extracted honey.

Mr. Muth—Five-gallon can, two in a crate.

Pres. York—Mr. Wilcox, you will admit of that, will you?

Mr. Wilcox—No; I am not willing to go as far as that; let it go at five-gallon cans until we have demonstrated the further use of those round jacketed cans.

Sec. Tyrrell—There is a question; it was a surprise to me to learn it; there are some bee-keepers who ship a 60 pound can, gross weight, and others of course make it 60 pounds net weight; it seems as if something should be settled, whether it contains 60 pounds of honey, or 60 pounds of honey with the can. That would come up as another question, though, would it not?

Pres. York—Yes, that could be considered later. Are there any further remarks on the motion to adopt the five-gallon can?

The motion was carried.

Mr. France—In regard to the question Mr. Tyrrell brought up—If you comply with the demands of the pure food law you will have to sell a 60 pound can net, and not gross; when you sell 60 pounds according to the pure food law, it does not mean including the can; and the Government will get after you if you do it. In any article of food the Government demands that you get what you pay for.

A Member—Those 60 pound cans filled as full as you can fill them, will not weigh 60 pounds.

Mr. France—They hold 60 pounds net weight, square or round cans.

Sec. Tyrrell—I think there is a difference in cans, in size.

E. A. Duax (Wisconsin)—I find that the round can doesn't hold as much as the square can does.

Mr. Wilcox—The 60 pound can will hold 60 pounds of honey if they are filled full at the proper temperature.

Pres. York—The quality or ripeness of the honey makes a difference; the density of the honey.

Mr. Holmberg—The grocers sell honey by the section; they never sell by the pound. If you buy berries you buy the box, large box or small box. If I am going to buy 60 pounds of

honey, I am going to have 60 pounds net.

Pres. York—What is the weight of a gallon of honey?

Mr. Holmberg—12 pounds.

Pres York—Not very often. I had a talk with the National Biscuit Company buyer about a year ago; and they test every sample of honey that comes in, and only once in all their years of buying did they find honey that weighed 12 pounds to the gallon; it is nearly always $11\frac{1}{2}$ or 11 and 14 ounces, but only once in all their buying did they have 12 pounds to the gallon.

W. E. Krause—There is a difference in honey. To make a show I often put honey in a glass, put the light honey in the bottom and the dark at the top; keep it there for years. You have sometimes a pretty hard time to get buckwheat honey 60 pounds to the can but clover honey is heavier.

Sec. Tyrrell—I know of a large honey-buyer who won't buy honey in 60 pound cans. I have bought honey to some extent to sell to the retail trade in the city of Detroit, repacked it, and almost invariably when I buy a certain number of pounds in 60 pound cans, draining every ounce of it, I find a shortage when I get through. I wonder how many have that same experience.

W. E. Krause—That is a good deal like buying sugar; I had a neighbor once who used to buy sugar by the quart, because he got more sugar.

Mr. Kimball—How many pounds of honey should be given for a gallon? I have been in the habit of selling 12 pounds to the gallon; I have an impression I read, perhaps in *Gleanings* a few years ago, that was the government standard. If I am not correct I would like to know it.

Mr. Dadant—I believe well-ripened honey will contain twelve pounds to the gallon; you all know that the nectar in the flowers in the first harvest usually contains 75 per cent of water; most of the moisture is really evaporated, but there is a great difference in grades of honey. Honey at this time of the year is almost always heavier than in June; with basswood a great deal of it is not sufficiently ripened, and you will find that honey foams when you transfer it from one vessel to another, and you will find that it weighs less than 12 pounds to the gal-

lon. I believe a five-gallon can will usually hold 60 pounds, but it is a great deal of trouble for those that buy in car lots to make sure of the 60 pounds net per can. We weigh every can when we buy in carlots. We nearly always find a shortage.

Pres. York—Do you take the can out of the box and weigh them?

Mr. Dadant—Yes, we do; and we examine the honey in every can, and weigh it, so that when we sell the honey we don't have a shortage; it is unpleasant to get complaints of a shortage. Do not let us give more than the weight, but let us give full weight; the pure food law insists that we give full weight. When the pure food law was passed the demand was that we have the net amount labeled on the can, and we did that every time; of course we have to charge a little more for the honey.

Mr. Otto—75 per cent evaporates, did you say?

Mr. Dadant—When I read that, I thought 75 per cent was an over-statement, but I have seen it so often claimed by scientists that I believe there are times when it does shrink 75 per cent. If you weigh a hive in the morning, then after weighing it in the evening you will find a great loss. Do you ever put the hives on the scale and weigh them every day? We used to do it, but didn't do it regularly enough, but the scientific men are very particular, and they weigh in that way, and claim that nectar will lose $\frac{3}{4}$ of its weight. I believe it will ever be.

Mrs. Chatfield—I wanted to ask if our cans that we buy—60 pound cans—uniformly hold five gallons.

Mr. France—Square or round cans.

Mrs. Chatfield—Either.

Mr. France—The majority of the square cans will hold full 60 pounds, but that is honey in this vicinity; they would hold about $60\frac{1}{4}$ or $60\frac{1}{2}$ of the Western Colorado honey, where it is dry, but of the five-gallon round can, I want some of you to stand a little correction in regard to that. It is a new feature which I have been trying to bring before the bee-keepers to market honey in five-gallon instead of two, and the convenience of one can—the first can made did not hold 60 pounds—some $58\frac{1}{2}$; some 59; some $59\frac{1}{2}$ pounds; but it was learned

where the trouble was. I had cans made, in order to get the 60 pounds.

Mrs. Chatfield—I have used the round cans, on Mr. France's recommendation, and last year we had considerably more than 60 pounds of honey.

Sec. Tyrrell—There is still another point: I was in a canning factory a short time ago, and asked the sales manager at what price he would furnish us 60-pound cans. The very first thing he asked me, "What are the dimensions?" When I got home, I found the old cans were of different size. I find these canning factories, in manufacturing cans, cater to the man that buys them in large quantities, and sometimes make short-weight cans; the question that occurred to me was, "What are the dimensions of 60-pound cans that should be used by honey-producers?"

I received a shipment just a short time ago where one can had burst open by coming just a few miles over the railroad; the tin was too light; the can or case was not solid enough to stand any kind of rough usage.

We have something to do—to learn what size our 60-pound cans should be, and what material we want our shipping-cases made of, and whether with one division-board between two cans.

Mr. France—In our last Annual Report, as you know, the picture taken at the annual meeting was folded in the Report; the best we could do to get this cut, and printed, last year, was \$17.50. I am instructed to cut that out this year. Anyone can have one of the pictures taken this year by arranging with the artist.

The Convention then adjourned until 7:00 p. m.

SECOND DAY—EVENING SESSION.

Pres. York—We have come to the last session of this Convention—the Co-Operation Session. Every session has grown more important, I believe, from the first, and this session certainly ought to be the liveliest of them all. But before taking up the program of the evening, I want to say that this gavel was made from wood taken from a tree that Father Langstroth planted in Oxford, Ohio, 50 or 60 years ago; a lady in Chicago—Mrs. J. I. Glessner—thought it would be very nice to

have some gavels made out of the wood of the tree that Father Langstroth planted, so she sent for a limb of it, and her son made two gavels; this is one of them.

When the National Association met in Chicago, in 1905, Mr. Dadant was President, and I was President of the Chicago-Northwestern Association. Dr. Miller presented this gavel to Mr. Dadant, President of the National, and another to me, President of the Chicago-Northwestern. For the past two years I have had charge of both gavels, as I am still President of the Chicago-Northwestern. The gavels are made of bass-wood, and are very nice gavels. This one, of course, will always be kept in the hands of the President of the National, whoever he may be. I thought you might like to know the history of this gavel.

Co-Operation Among Bee-Keepers.

Pres. York—The first subject of this "Co-Operative Session" is, "What the Colorado Honey-Producers' Association is Doing."

Sec. Tyrrell—This is another one of the cases where a man is absent, but he has sent us this very interesting paper:

What the Colorado Honey-Producers' Association is Doing.

It may seem impertinent, but it is true, that the Colorado Honey-Producers' Association is doing what nearly every writer in the bee-journals of late has been doubting the possibility of doing.

The Association was born of necessity, for the year 1899 the cost of production was higher than the market price of honey. Comb honey would not sell at \$1.65 to \$1.75 per case of 24 sections, and fine honey, at that. Something had to be done—the organization of the Association, with a capitalization of \$10,000, was the result. It was rough sailing for the several years, but a dollar a case was added to the price secured for comb honey, and supplies were bought and sold for less than had been the rule a short time before.

The Association is now buying and selling bee-supplies throughout the Rocky Mountain region at a price lower than factory list-price. No dealer in the territory can successfully compete with the Association who

does not meet the prices made by the Association. There are no goods handled because they are cheap. The goods that are cheapest in the long run are sold at as close a margin as possible. Supplies are sold to non-members at the same price as to members, and the Association has a considerable trade with these, some of whom take stock when acquainted with the business and methods. And so the Association grows.

The Association sells the honey of the members on commission, and as most are comb honey-producers, the sale and shipment of comb honey in car-lots is a specialty. From fifteen to twenty cars are handled annually, the most of which is comb honey. Some honey is handled for non-members on commission, and some is bought outright. The business done with non-members tends to instill confidence, and many finally take one or more shares of stock. Ten per cent commission is charged for handling the honey through the Denver warehouse. Insurance is carried on the honey while in the store, and the expense for drayage, etc., in loading cars is borne by the Association.

Probably over 50 per cent of the comb honey is loaded at the nearest railroad switch to the point of production, which may be several hundred miles from Denver, or even in other States. Five per cent commission is charged for selling, when loading in this way, as there is no insurance, no drayage, and the producers pay the expense of loading and bracing the car. The manager collects, and remits to the producer for the full amount, less the 5 per cent commission. The manager or some representative generally inspects the honey before or at the time of loading.

The Association has been bottling honey for twelve years, with a constant endeavor to improve methods, and get the honey to the dealer and consumer in the very best shape. The constantly growing trade is indicative of the measure of success. The bulk of the bottled and small tin-package goods is handled through wholesalers and jobbers, who receive the usual trade discount. This has been found to be the most satisfactory method of distribution. The sale to retailers, locally and outside, is a considerable

item. Local wholesalers and retailers call at the store for the honey. Outside orders are sold f. o. b., Denver.

The equipment for melting, straining and bottling honey is not surpassed anywhere, when quantity and quality of work done is taken into consideration. The bottling of honey to prevent early granulation has met with a measure of success, which is having an influence on bottled honey sales.

Every box or case of package-honey bears the imprint of the Association in large letters upon it, and the caps of all jars bear the trademark in addition to the label.

The honey is put in five sizes of glass jars, the pint jar being the largest. The tins are in four sizes, a pail holding about a quart (lard pail style), beautifully lithographed; and quart, half-gallon, and gallon friction top cans.

The Colorado Honey-Producers' Association was an outgrowth of, or was conceived in, the State Bee-Keepers' Association, as the latter could not do the business that was desired. The Colorado Honey-Producers' Association is handling the business which is outside the province of the State Bee-Keepers Association. The organizations are district, though many beekeepers belong to both. As an educative influence the Colorado Honey-Producers' Association has done, and is doing, much to bring about better methods of production, grading and packing of honey. The result is, that the word of the Association is accepted by the buyers, who seldom inspect the honey till unloaded at destination. This saves sending a man, at great expense, a long distance to examine the goods before purchase. The difference goes to the producers who sell through the Association, which guarantees the honey to be as represented, and stand ready to make any error right, if the Association is at fault. This reputation for guaranteed grading is worth fully twenty-five cents a case on comb honey. The Association get this much more than others, on the average.

Freight Rates and Breakage Claims.

The many carloads of bee-supplies and honey handled make the Association's business of importance to the railroads to the extent that rates, when

excessive, have been modified when brought to the attention of the Western Classification Committee. Hundreds of dollars have been saved bee-keepers in this way.

The Association is also able to collect bona-fide claims for breakage in shipment, in a much more satisfactory manner, and with more promptness, than can individuals.

Dividends and Rebates.

At the end of the business year an inventory is taken, dividends on stock declared, and the remaining cash is rebated back to members according to the amount of honey sold. So far it has cost members less than 3 per cent on the average to market their honey. Dividends of 10 percent on stock have been paid since organization. Half of the rebates are now paid in stock, in order to furnish capital to extend the business.

The stockholders are now scattered over a dozen states, and honey is handled for members in as many. The business is no longer confined to Colorado, but has burst the bonds of its name, and is a force to be reckoned with wherever honey is produced in the West.

The capital stock is now \$20,000, and is altogether inadequate for the volume of business done, which runs from \$60,000 to \$100,000 each year. Shares of stock are ten dollars, and are non-assessable. There are about one hundred and fifty stockholders who own and operate probably twenty thousand colonies of bees. Bee-keepers only can hold stock, and no one person can purchase more than ten shares without the consent of the Board of Directors, seven in number.

The Association has proven that co-operation among bee-keepers is a practical possibility in the West, at least. There are dissatisfied ones, but they are in the minority, and in the main the troubles are minor ones. Little of the stock is offered for sale by those who at times may become disgruntled.

To sum up, there is not any doubt but that the Association is the greatest single benefit to the bee-keepers of the West, and especially so to the members. The best of supplies are sold as cheap as is possible with good business. The price of honey has been raised,

and costly methods of distribution eliminated.

The Colorado Honey Producers' Association is doing what it was organized to do—it is a success.

FRANK RAUCHFUSS.

Denver, Colorado.

Pres. York—Surely this is an interesting paper, when we hear of things that have succeeded. Is there anything else about the Colorado Association? Perhaps there is some one here who has lived in Colorado and knows something about it personally, further than the paper. We would like to hear from any such if you are here.

Sec. Tyrrell—Now, there are two points in this I wish to mention, for the reason that there might be a time when the people of Minnesota will want to organize something along the lines of a stock company. Having had a little experience in that line, there are two things to look out for: Be sure your stock is non-assessable; and then, the company cannot begin to levy assessments on you after they get you incorporated.

He says that only bee-keepers can hold stock, and no one person can purchase more than 10 shares without the consent of the Board of Directors.

A Member—They cannot make that hold in law. If I could find some fellow who would sell me shares, there is nothing preventing me getting them.

Mr. Tyrrell—As a rule, the majority of stockholders stand by it; it serves its purpose the same as though it really could be enforced.

Pres. York—In selling the stock they could have the person buying the stock sign an agreement.

Mr. Tyrrell—But how could you hold them? There would be nothing to hold them if they did agree.

Mr. Wilcox—If the stock is issued with a distinct clause written in it, or make it not transferable without the consent of the Executive Committee or Officers of the Company, that would probably make it work all right.

Mr. Tyrrell—The law will not back you up in it—not in Michigan.

Mr. Wilcox—It will in real estate; if you sell a farm and deed that to a certain person, it won't descend to his heirs necessarily unless so asserted in the deed. I don't know, I am a little in doubt about it. You can deed it

to him and his heirs and assigns forever, but if you don't, I don't know that it necessarily follows that his heirs can dispose of it. It might be construed that it was deeded to him for his benefit during life, were those words omitted.

Mr. Tyrrell—Where would it go then?

Mr. Wilcox—Back to the man who sold it; hence all warranty deeds deed it to him, his heirs and assigns forever, I suppose that stock in bank is not transferable without the consent of the officers of the bank, and would not take effect until the transfer was registered; I will raise that question when I get home, because I am one of the directors of the bank there.

Sec. Tyrrell—Well, of course, different states have different laws.

Pres. York—We have a number of topics tonight; the second is, "Co-Operative Effects in California."

Sec. Tyrrell—I think we will have to pass that because we could not get a California man here.

Pres. York—We will go from California to Michigan; Mr. Tyrrell will tell us of—"The Michigan plan, or what the Michigan Association is doing."

Sec. Tyrrell—In the first place, when we started our booklet we had some difficulty in holding our membership; so we conceived the idea of getting out a booklet containing the names of members, their addresses, the number of colonies they had, and the amount of honey; that was about seven or eight years ago. We sent to all bee-keepers this booklet, expecting them to distribute it, but we found that the bee-keepers who got it did not distribute it; they said, "We are advertising the other fellow's honey as well as our own." There is where the spirit of selfishness comes in.

After a few years of that kind of business, we quit, and we sent only two copies to each member, unless he made a request for more. Then the booklet is advertising in the bee papers.

Then we omitted the amount of honey that we had, because we found in actual practice that some buyers did not know anything about what a good or bad crop of honey was—they would look at that book and say, "My sakes, look at the honey there 's for sale by those members; we can't pay you any such price as you are asking!" Then we cut that down, and gave the number of colonies each member had. Last

year we went a little further than the book, and compiled a list of 100 buyers—men who actually bought honey; we gave the buyers' names and addresses, a statement of the amount of honey he wanted, the kind, etc., and that little list of 100 buyers went to every member of our association. Look what that meant to the beginner. He would secure a crop of honey and would not know where to sell it, nor how much to get for it; with a list of 100 buyers before him, he had 100 outlets for his honey.

Last year the Executive Board conferred after the honey flow, and wrote out a little card advising the members of the honey conditions, and telling them what they ought to get as a minimum price.

That was sent to our members so that no member was selling his honey for less than the amount advised on that card, and most of them got more because we didn't get it too high for last year.

And this year we have run across another proposition, in that the buyers got ahead of us on the booklet; a great deal of Michigan honey has been bought up to date, and the booklet is not mailed to the members (until this week—a little late).

Now, the question comes up, whether the booklet is not too slow, and I suppose the plan of our Michigan Association next will be to get a report of the crops from our members, just the same as formerly, and then before waiting for the booklet with instructions to appear, tell him the conditions in the state, and in every part of the United States, in general. In that way we try to keep our members informed as to what is going on; what the conditions are; what they ought to be able to expect in the way of marketing their honey, that method has built up our association until we have between 200 to 300 members at the present time; I think there are over 250 paid members today, with probably enough more that will renew to make it 300.

There is one thing we had last year, we had a campaign against foul brood.

We sent out circulars to 4000 Michigan bee-keepers—a foul brood circular. It was a four page circular; on the front we had a picture of a healthy frame of brood and a diseased frame of brood. We sent this out and the

amount of good it did, of course, would be impossible to estimate. The inspector told me a few days ago, that he had found lots and lots of places where they had received the circular; in a measure it prepared the way for his inspection.

We are trying to bring the bee-keepers and the jobber closer together, so that the one who wants to know where to sell may have the information, and the one who wants to buy will know of whom to buy and where the honey can be had, I think we have done a remarkably good work along that line.

Mr. Lathrop—What was the minimum price last year?

Sec. Tyrrell—We advised our members to sell their extracted honey at not less than 8 cents f. o. b., and not less than 14 cents for comb. This simply prevented the beginner and many others from selling under 8 cents; that was not the top price.

The National Association and Co-Operation.

Pres. York—"What can the National Do Along Co-operative Lines?"

Mr. Poore—I recognize co-operation as the highest form of business civilization. I was told that this topic was assigned to me. I felt it required of me to outline my views as to what the National Association could do on the line of co-operation.

It reminds me of the condition that I was in when I first started out in the world at the age of 16, with \$10, and without half as much knowledge as the ordinary boy of ten years of age has about things. I went to work on a farm and they had a very lively bull-terrier dog; I was not familiar with dogs, nor what they would do; the lady said he was a good dog to get the cows.

I was working along the lane they had, and I heard the dog coming down the lane; I could see his teeth as he went by, making for the clover-field. He shot beyond the cows a little way and just as quick as they saw him coming each cow tried its best to get in that lane first; every cow was trying to get ahead because they knew the dog would try to hang on to the tail of the cow. I thought that was a great way to bring cows home!

Now, our competitors' system of

business reminds me of the method used by the cows, trying to get ahead to keep out of the reach of the dog.

The report read of the co-operation in Colorado and these other States indicates to me that the bee-keepers of those States have got to the point where they are forced to adopt some other system besides the one—every fellow for himself.

I am forced to view conditions as they exist in this State. Under the competitive system the man who has the poorest article is the man who endeavors to get the best price for it. I don't feel in this State we are in shape to start the co-operative effort with any degree of success, because we have not reached that point.

It occurs to me that before the National organization can take any great step in the line of co-operation the bee-keepers of a large number of the States must be forced to that last condition, to save themselves financially—to adopt co-operation. We have to reach that point where the bee-keepers themselves who produce the honey will receive what they are justly entitled to, and those who consume will not be obliged to pay more than they should pay.

Now, under the conditions in which we find ourselves today, it occurs to me that there could be some general advertising done, in what I would term a co-operative way; that each contribute individually towards the National organization to have a general advertising of the actual benefits of honey as a food, over and above all other sweets. We have not advertised the benefits to be derived from the consumption of honey sufficiently to make the demand for it what it should be.

If we could advertise the benefits of honey to that point where the demand exceeds the supply, we would never have any trouble about the price.

When I heard of the subjects named here, and the members of the National Association who were to talk on the different subjects not being here, it is hard for me to realize that the National Association is in shape to take up co-operative effort at this time and make it effective.

Co-operative effort is a development brought about by conditions that force people to resort to that to enable

them to secure what they are justly entitled to. Denmark is one of the most co-operative nations I know of; they had to co-operate in order to exist, and the farmers there are thriving.

Now, the bee-industry is such that a man is not obliged to follow it unless he wants to, but the most of us that have the bee-fever will follow it even at a loss. Now if we can devise any form of advertising that will produce general good results to all the bee-keepers throughout the United States, that is what we want to do. If the National can form some line of co-operative advertising to get the people to realize what the honey is as a food, I think it would be a beneficial step to take, and I, as an individual, am willing to contribute my proportion of what would be considered necessary to start some kind of educational advertising as to the benefits of honey.

I know there was a circular sent to me which I was requested to publish in a local paper—sheets of printed matter giving the value of honey, its use in various forms, what the different medical men had stated in regard to the benefits of honey as an article of food as compared with other sweets,—but I could not get our local papers to publish it. If a man wanted to have a publication of a dog-fight that was to take place next week, they could get it all right, if they gave the newspaper some good seats at a show; but I could not get anything published locally with reference to honey-production or its value.

I tell you, my friends, I may be considered pessimistic, but I am optimistic, but conditions today are such that commercialism seems to take possession of the people; there is no form of amusement gotten up today but it is "How much can we make out of the crowd gathering to see it?" There is no form of amusement gotten up with a view of educating the people, and we are handicapped in our efforts to get this subject before the people; but if we can desire a method of advertising the benefits of honey through jointly contributing to the National Association, it will take but very little from each individual to have a sufficient fund to do a large amount of advertising.

I had no idea I would be called

upon to take any part in this program until yesterday, and this topic is of such great importance it is hard for me to decide what to suggest what the National Association take up at this time as a co-operative measure.

Pres. York—Mr. Poore certainly has introduced the subject splendidly. It seems to me there ought to be several of those present who will be able to say something that will help a little further. The question is, "What can the National do along co-operative lines?" Has any one anything further to suggest?

Mr. Wilcox—I might say that I think the Michigan plan gave more of co-operation than the Colorado. The Colorado plan is best on joint-stock-company operation; the Michigan plan is co-operative, pure and simple, so far as they have gone, and I believe that is the line upon which the National should progress—first find out what there is to sell, and where to sell—that is a good starter.

Pres. York—I think that probably in another year we will know more about this than now. If we adopt the new constitution it will give us an opportunity to work on co-operative ideas. At the next convention we will know more about what this Association can do along co-operative lines than we can think of tonight. But if you have anything else to say we would be glad to hear from you. We would like suggestions from all our membership to see what they want done. If the Michigan plan is though best to start on, no doubt something like that will be started. I think no one would think of starting on the Colorado plan at once, because that means a great deal of capital.

Sec. Tyrrell—I remember when we were boys down at the old "swimmin' hole," if some big fellow wanted to give us a licking, we always felt pretty good if we had a big brother to take our part. I feel that the National Association of Bee-Keepers should take, with reference to its various branches, just the position of the big brother, and help all the local branches in their efforts.

In Colorado they are going it alone; they have had no help from the outside; nobody else has told them what

to do, because nobody else has done it. If Minnesota should try to start some co-operative effort, would it be necessary for this state to go through all the preliminary operations that the Colorado Association has, provided it was possible for the National Association to come and help you get started—tell you what Colorado has succeeded in doing, what obstacles they have had to overcome, and simply act as a big brother to help you in your efforts to get on a right footing?

So far as the National could go in actually handling honey, I don't think we are at that stage in the game, but they can act as an adviser and help you get started right. This manner of organization and incorporation is a vital topic to every association that ever undertakes such a thing, because one little slip in getting organized will put you in a position where some day you have the penalty to pay.

You want somebody, somewhere, somehow, to show you what you ought to do, and get on the right road, and there the National Association, I think, can be of vital importance to the local branches that are being started all over the country, in getting your local associations on the right track, and when you all get to going in the right direction how easy it is to work in unison and have united effort. Outside of that I don't see where there will be a better field for the National than to work right along that line.

Mr. Lathrop—In the Annual Report of the Wisconsin State Inspector of Apiaries, I notice a reprint of a little paper I had in our State Association last winter; the last clause gives a little outline or plan for something of that kind which I will read:

What I advocated was representative bodies, and I stated that our Wisconsin State Association was not representative because only a mere handful belonged to it or took any interest in the deliberations; they were not representatives, and therefore were of no particular good to the larger body. In order to represent there must be delegated authority. "This leads me to suggest a plan for the reorganization of Wisconsin bee-keepers. The plan is this: To create local associations in all parts of the state where there are resident bee-keepers; each association to hold a meeting at least once each year, and at that meeting to ap-

point a delegate to a state convention which by reason of these delegates shall represent the whole body." It further says that I had not the space in such a paper to go into details regarding the work that such a central organization should attempt, but would say one thing, that it should establish uniform prices and grades. "The indiscriminate butchering of prices should be stopped at once and forever, and this could be done, if in no other way, by having the State Association offer to buy all the honey for sale in the state, under a certain price."

Now, if we could do this through our State Association or National, it would be a great step, and I don't see why we can't. That is something the honey business has always lacked; it is not like the egg business. If a farmer raises any eggs, if he has any eggs to sell, or a pig to sell, or anything of that kind, you can't buy it from him for one cent less than the market price in his state, and he knows all about what the market price is; but not so with honey. If bee-keepers have honey to sell, oftentimes they do not know what it is worth, and more often don't care, but if they have eggs to sell they know all about it, and get the market price, and sometimes a little bit more. I have always thought we ought to do something like that, so that everybody would know what honey is worth, and make it a staple article.

W. E. Krause—For a couple of years I have thought the National Association could help bee-keepers on some plan, the same as the Michigan plan. If the bee-keepers of the United States could know the condition of the honey market; if the National could have a Board of Directors who would in some way get the reports and make a minimum price, the same as in Michigan—that is the first thing the National ought to do, and it would help a great deal.

I think if the National would advise the bee-keepers the uniform minimum price—one for Chicago, one for Cincinnati, one for Minneapolis—we would know how to sell in the market.

A Member—There is one point almost all of us overlooked. I think it has been spoken of. Mr. Krause says, "The National Association should inform the bee-keepers about what they ought to have—what prices ought to

be paid." But here is the man to inform—the fellow that does not take a bee paper, and does not belong to an association; that is the fellow you want to reach; devise some means to get these farmer bee-keepers who have no bee papers and don't belong to any association—get to these men. It would be an easy matter for the association to notify their members, but I understand a very small per cent of the bee-keepers of the country are members of associations.

Sec. Tyrrell—There is missionary work for you members; go to that bee-keeper and say, "Why did you sell your honey for 12½ cents? Don't you know the market is 14 cents? If you don't know where to sell your honey, and at the best price, if you are a member of the National, they will inform you of the market" and you will get those fellows to become members.

Pres. York—I think Mr. Bacon gave us a good suggestion today, that it would be well for the National Association to follow the coming year. He said that so far as his firm was concerned they would be willing to send out a National letter with their catalog, and these catalogs would reach a hundred thousand people; it would reach a great many bee-keepers who don't take the bee papers and who sacrifice their honey and spoil the market for others.

I believe every bee supply dealer or manufacturer in the country would be willing to do the same thing as Mr. Bacon's firm has offered to do.

I think the Secretary could get out a little leaflet, printed both sides, giving a great deal of information concerning this Association and urging bee-keepers to join; or, if they would write to their Secretary, he could put them in touch with their state or local associations.

It is not the members of this Association who are making trouble; they are informed, and they know better. I suppose nearly every member of the National Bee-Keepers' Association here reads some bee paper and they are willing to co-operate, but it is the other fellow who cuts the prices.

I think Mr. Bacon's suggestion a fine one, and it would put us in touch with the smaller bee-keeper; if you could get up such a circular as suggested and say to them, "Do you want to get

more money from your bees? Then write to the Secretary of the National Bee-Keepers' Association and he will tell you what to do." Then send your literature; work along that line, and let them know what this Association proposes to do for them. If they put \$1.50 into the membership fee of this Association, and will try to work with us and follow the suggestions of the Association, they will make from \$10 to \$100 more on their annual crop of honey. I believe if we can show them that we can put more money in their pocket, they would be willing to pay a membership fee and work with us.

W. E. Krause—I kept close watch of the price of honey last year in the bee papers. Last fall I had some comb honey. I wrote to one commission house in Minneapolis and asked what they would pay for No. 1 honey. I didn't have a great deal of fancy honey; and they wrote back they would give me 14½ cents for fancy, delivered there.

Now I would have to pay the freight, etc., and get 14½ cents in Minneapolis, and I said, "You give me 14 cents and you can have it," of some one right there, and they bought it—14 cents for No. 1; a shilling for No. 2. I afterwards learned the commission man didn't offer me enough; that honey was scarce. I watched the bee-journals, but they are not up-to-date in quoting the market price, sometimes.

Mr. Demuth—They won't tell you.

W. E. Krause—If I had been informed that the honey crop was as short as it was, I would not have sold for less than 16 cents, and I would have made \$50.00; and then I could have paid \$2.00 or \$3.00 to the National for dues, and I would have made more money by it.

Sec. Tyrrell—Now let us put ourselves in the position of the buyer. The bee-paper editors ask the buyers to give us quotations; do you suppose it is to their interest to quote prices any higher than is really necessary? You can't blame them. I feel we are asking quite a lot of them when we ask them to do it. It is to their interest, of course, to quote a price, because it gives them a certain amount of popularity among bee-keepers, but when you get down to facts, is it to their interest to quote the market higher than they really

have to? So if you are going to look to that source, the question is, How reliable is the information? We must get at it in some other manner.

This question has come to me very forcibly. This man made a statement that he doubted whether very many of those quotations that appeared in the bee-papers were really reliable, and yet he was a honey-buyer.

You are asking quite a lot when you ask a honey-buyer to quote you the market price, knowing that if he does quote the market that every bee-keeper that gets that will not sell him for less than the price that he has quoted; otherwise he might pick up lots of honey at a good deal less price than the market, if the bee-keeper does not know it.

W. E. Krause—We can't blame the commission men for offering low prices. We bee-keepers are the ones who ought to know, we ought to have some central office to give the crop report; then, if the National would send the members statements telling what the honey is worth, how much in the United States and what the price should be, then may be the commission man would know, and we would get a right price for our honey.

Probably the man who offered me 14½ cents for honey last fall didn't know how much it was worth. We are to blame for under-selling if we are not posted on what honey is worth; I try to keep myself informed.

Mr. Wilcox—Now that somebody has broken the ice—I have been thinking for several years, but hardly had courage to say anything. I have been a subscriber to the American Bee Journal for about 30 years, and I have recommended it steadfastly to all my friends and acquaintances, but for the last few years it has begun to go back on me, and why? Because it ceased to be a weekly; since it ceased to be a weekly I could no longer recommend it as superior to all others, because I could not get the latest quotations. I have always regarded the editors of bee-papers as being thoroughly honest.

Pres. York—We certainly are!

Mr. Wilcox—But they are too slow.

Pres. York—We are "slow but sure."

Mr. Wilcox—They are like the weather forecaster; he knows what the weather is after we get forecast!

There is no use saying anything

more; you know what I think; the remedy is what we need next. I don't see any prospect of any better remedy than to make up our minds to abandon the bee-papers as a source of information regarding prices of honey, and look for information through the Information Bureau of the National Association.

Pres. York—You should have daily reports.

Mr. Rice—I think Mr. York has touched a vital point in regard to trying to educate these farmer bee-keepers.

I want to relate a little incident: My son was coming to make me a visit, and he almost always brings me a present when he comes; he came with a package and said, "Pa, I want you to undo that and see what I got for you." I was surprised to see two sections of comb honey, as fine as any one could produce. I said, "Well, I am glad you brought me a little honey."

He says, "How much do you think I gave for that?" I said, "Fifteen or 17 cents." "No, not as much as that; I got that for 10 cents a pound."

"Where in the world did you get that for 10 cents?" I asked. He replied, "A little way down on the Mississippi river."

He was going through the town, and he went to the store there and saw the honey, and asked the price of it; they told him and said to him, "We get that honey for 10 cents in trade, and sell it for 10 cents cash." I told my son, "You would better take all you can get of such honey at that price."

Now, that honey was as nice basswood honey as I ever saw in a section; there were good 16 ounces to the pound in a section; it was sold by the section; it was full, and very nice.

Pres. York—I don't know whether I ought to say anything or not in reply to Mr. Wilcox. I am willing my friend, Mr. Tyrrell, should publish a good paper for \$1.00 a year, issued weekly! I tried it something like 20 years, and I don't want any more of it. You people are not willing to pay what it is worth for a publication like that. I should have had \$2.00 a year for the American Bee Journal when it was a weekly. That is the trouble—you can't get out a paper weekly, like the American Bee Journal, for \$1.00 a year and make a living.

Mr. Wilcox—We have always paid you all you asked.

Pres. York—But if I had asked \$2.00, half the subscription list would have dropped off. You never will catch me trying again to publish a weekly paper at a dollar a year; it cannot be done with the expense there is in the city, and it is foolishness to think of it—publish a paper like the American Bee Journal for 2 cents a copy! That is the reason it was discontinued, and made a monthly. Outside of the market reports there is absolutely nothing in bee-keeping that requires announcement every week; once a month is plenty often enough to learn the new things in bee-keeping. If it is simply a matter of reports, it seems to me the National can learn the extent and prospects of the honey crop much better than can be given in a publication, when we get the National running the way we hope to have it. We will have members scattered all over the country, and they will feel an interest in reporting to the National; such an interest that they would not have in reporting to a bee paper. I know what a job it is to get out a crop report; I tried it once, and that is all I want; I learned something in doing that.

If we could get a crop report, or market quotations, every week, it would be a good thing, and if it were made daily, it would be better, probably. The very day you are ready to sell your honey, you would like to have the prices. There is one paper you can get the market reports every two weeks. I am glad to advertise my friends. I would like very much to publish a weekly bee paper; I enjoy it; the trouble is, there are not enough bee-keepers who are willing to pay what it is worth.

Mr. Lathrop—For the encouragement of Mr. York, and in order to give both sides of the question, I would say that I like the American Bee Journal since it is published monthly. I have a month to use the Journal, and digest it, and look it over, and I would rather have it monthly than have it come weekly.

Pres. York—I think perhaps Mr. Wilcox's digestive apparatus works too fast.

Obstacles to Co-Operation.

Pres. York—The next question is, "Obstacles to be met with in co-operative efforts, and how to overcome them."

Sec. Tyrrell—I had assigned this topic to James K. Hedstrom, of California. He has sent a paper which I will read:

I appreciate your courtesy in selecting me to make a few remarks on the above title in your program. I suppose you mean co-operation in a broader sense than locally. Locally co-operation is a success in several districts at the present time. The only reason it is dormant in other districts is the lethargy of the bee-keepers in those districts. This lethargy is due either to the producer being satisfied with the dealer's price paid him (?) or the producer's ignorance of the advantages to be derived by co-operation, and on this I would refer you to my article on "Co-Operation in Selling Honey," in Gleanings of April 1, 1911.

If a National selling agency can be effected by affiliation of present and future local organizations, then the first obstacle—standardization of honey-grading rules, in justice to the dealer and consumer—may be met. The idea here is to make a staple of honey so that when the consumer thinks of honey he thinks of it as he does of a pound of sugar, or a five-gallon can of gasoline or kerosene, and knows the price is the same wherever he goes, for the particular grade he wishes to buy.

The next obstacle is the elimination of the honey commission man and the speculator. This will be accomplished as the producer gains confidence in the National selling agency; and the last obstacle will be importations of foreign honeys as the price of native honey goes up. This can be stopped by the tariff; or by effecting an International selling agency (?).

The only other obstacle will be minor details of a business character. I would emphasize the necessity of keeping clear of all kinds of trade agreements, pooling interests, etc. The National must be free to dictate, and, if they conduct a clean, honest business, they will dictate.

JAMES K. HEDSTROM.

Calabasas, Calif.

Sec. Tyrrell—It seems to me there is a chance there for some lively discussion on what you are up against in co-operative effort.

Pres. York—I think that Mr. Poore would say one of the greatest obstacles

is "Ignorance on the part of bee-keepers!"

What obstacles will we have to meet, and what will we have to overcome?

Mr. Johnstone—It seemed to me while I sat here I could not keep still any longer; there is certainly one man in every county in this State who could be relied on to make a report on the honey crop in that vicinity. I believe such a person could be found in every county in the United States to report to the National officers; that is what is done by our wheat buyers all over the country, and they have a National Bureau, which reports on the conditions of the wheat crop every year.

Well, now, what has happened? There is somebody in every county all over the country—in Dakota, in Minnesota—who is out there in their carriage riding around all over the country, looking every few days at the condition of the wheat crop as they see it; they report to the Board of Trade in Minneapolis, or Washington, or wherever they are; an officer compiles the report and send it out.

It seems to me there are bee experts enough all over the country who could make such a report to a National officer, and he in turn could inform the people what the conditions are, and what would be a reasonable price to ask for honey. Our Secretary has offered some good suggestions, and has given us a practical plan of that kind of work.

Pres. York—I think the Secretary could arrange under this new plan, if it goes through, with the various dealers and commission men to send the reports to him—daily, if necessary—and if any member wishes to have all those reports, let him write to the Secretary; you could get information right from him; he would have a lot of correspondence, where you get reports as often as you call for them; a small extra charge might be made for such reports. Probably nine-tenths of this Association would not care for those reports; some may not produce enough honey, and some may have their market already supplied, and they are satisfied with the conditions through what they get from the bee papers. It seems to me something like this could be done.

Some one wondered how the commission men got up their market reports. As I understand it, in Chicago,

they make them up from their sales of honey. When I send to Burnett & Co. for a market report, I imagine they make them up from their sales; if that is not right, I would like to have Mr. Muth tell us. They are not going to quote a higher price than a dealer that a commission man would be inclined to quote a higher price than a dealer that buys for cash—that buys outright, and sells outright. The commission man ought to be willing to put on the highest price he can get, but the buyer who deals on a cash basis wants to get it as cheap as he can. If Mr. Muth would like to say anything on this, we will be glad to hear from him, although we won't force him to do so, seeing he is from Cincinnati.

Mr. Muth—We quote the honey market on conditions, and sometimes the conditions, as we see them, are altogether different from what they are in reality. I will give you a little experience, an experience that cost a whole lot of money.

You all know that the demand for honey, especially comb honey, extracted as well, was greater than ever last year (1910). I think we received, inside of two months, a car-load and a half of comb honey in local shipments from the North, and as fast as they came in they were placed in different piles. We are very fortunately situated for buyers; as they come along the street I sell them their capacity. Here comes along a big retail grocer. I say to him, "I want you to smell this honey; this is raspberry honey." (This retail grocer knows that I am strictly honest!)

Pres. York—Like bee paper editors.

Mr. Muth—I tell him, "I think this is your last opportunity; you take this whole lot." I sell him that 40, 50 or 60 cases.

Along comes another man; I have another lot; may be not raspberry honey; it may be clover honey; it just fits his capacity. In that way we sold one car-load and a half of honey from local shipments, from our friends up North.

It was going so fast, and there was no more honey coming in, and no more in sight. All at once we get an opportunity to buy a car—a big car of comb honey from the other side of the Divide, in Colorado. This almost took my breath away, because I felt it called for 50 cents more a case than it was

worth—to pay \$7,000 for a car-load of comb honey, sight draft against bill of lading, and to know that this is 50 cents a case more than it is worth—it means that you had better look out! I took the car because the demand was so great; I was selling all the honey in sight; it was in October. Relying on my salesmanship, I believed I could unload half a car to my bee customers, and I brought a big wagon truck along the street where those friends of mine are who buy wagon-loads of honey, and I call on every one of them and tell them, "Here is your chance to buy your honey; it will be gone before night." I tell them the price. I sell 25 cases from that car of 1,900 cases. I paid the draft, of course; otherwise I could not have unloaded the car. Well, some times you sweat blood.

(I am pretty well situated in the honey business, as we have a hot room.) This was at the end of October, and in cool weather, and you all know you don't want any comb honey after the first of January. I knew, because I could not sell more than 25 cases of honey, that the price was 50 cents too high, and when the first of January came I had about \$4,000 worth of honey in that hot room; we wanted to get rid of it, but if I had sacrificed it I would not have made a cent, so I kept it, and kept it. I never get disgusted, because the honey business is a very interesting subject to me. I knew there would be a further demand for that honey, and I would not sell it and lose, but I did not make anything on it, if you were to add interest on the money invested.

You don't want to ship any honey to a man who won't pay his bills; nor to a man who don't pay the day he gets the shipment, either. You want to send your honey to a man that you are sure you will your money from, and then you like to ship there.

Three years back there was a bee-keeper in our neighborhood who was a very fine honey-producer; it was before shipments of honey were coming in, and I wanted his honey.

I help him out on bee supplies; if he doesn't receive a crop of honey I have carried him for about \$300.00 until he gets a crop of honey the next year; he can sell to whom he pleases, and then I get my money. Now, this fellow knew that he was the first man in the field with honey, and that he can get

any price he wants. I paid this fellow \$1,100 for his honey, at 16½ cents a pound, just to get it first, and sell it at 17 and 16½ cents. I no more had that big lot of honey in my house, when a car-load of Western honey came in, and was selling at the rate of about 14 cents a pound.

You have got to grin and bear that kind of things. I laid that honey aside, and I would not sell it until I could get 17 or 18 cents.

In quoting your honey market, you have to make yourself safe, and be fair with the producer, and I do really believe that the quotations in the bee papers for the honey market are about as fair as they can be. I would say, "Quote your honey market fair, always."

Sec. Tyrrell—There is another communication from Mr. Rauchfuss, on local shipments, if you want to have it read. It is as follows:

Local Shipments of Comb Honey.

Owing to an almost entire honey crop failure in Northern Colorado during the past season (1910), local shipments of comb honey from other sections of the State became necessary.

Some of these shipments were made by express, but most of them by freight, as our experience in former years with express companies has been that it is simply a matter of paying higher charges for a poorer service.

Having received many local shipments during the past fall, ranging in lots of 12 cases to several hundred cases, and in distance of shipment from 75 to 450 miles, we have had plenty of opportunity to experiment as to what is needed to make the shipping of small lots of comb honey during cool or cold weather a success, and will herewith give you some of our observations.

While warm weather prevailed, shipments came through in fairly good condition.

When cold nights came on, no shipment arrived in good condition when cases were shipped singly (glass always protected by thin boards), whether packed in single or double-tier cases.

Honey in double-tier cases came through with much less breakage than that in single-tier cases.

Honey produced without bottom starters in sections broke down more than with the bottom starters.

Single-tier cases and also double-tier cases crated together with lath (4 in a crate) came through in very bad condition; however, in explanation, it may be stated that these came the longest distance and were transferred twice in transit, and the damage, most likely, was done in the transferring by tumbling the crates around, as they have no projecting handles.

Single-tier cases with the new and much praised sliding covers have proven a dismal failure; cases had to be tied with a string in transit to keep them from falling apart.

Large printed cards with lengthy instructions to freight handlers proved of little or no value; evidently they were too long to be read.

The only lots that came through during cold weather without damage were those that were shipped in 8-case carriers, with straw or hay beneath the cases and projecting handles at the ends. While these handles are of little value to carry the crates, they seem to prevent the placing of the crates on end in the cars, and to prevent their being tumbled about.

Altogether the damage in these local shipments not packed in carriers has been so frequent that we have come to the conclusion to notify our members that after this we shall not receive any local shipments of comb honey unless packed in carriers. Another advantage of the carriers is, that the cases are protected and arrive in clean condition.

The present rulings of the Western Classification Committee do not make any distinction between comb honey shipped in single cases, glass protected, and comb honey shipped in 8-case carriers, which is manifestly a hardship to the producers, and the cause why the use of these carriers for shipments is not more general. I am, therefore, trying to enlist the support of large jobbers and shippers of comb honey within the territory of the Western Classification Committee to urge that comb honey in carriers with straw or hay beneath the cases shall go as second-class freight, for the reason that it will take less time to handle them, and the danger of damage is reduced to a minimum, thereby saving the railroads many damage claims. I hope that this move will find the support of this Association, at its present session.

FRANK RAUCHFUSS. Denver, Colo.

(The foregoing had also been read before a meeting of the Colorado Honey-Producers' Association.)

Mr. France—I got a letter from Mr. Rauchfuss that the Western Freight Classification had already gotten out a statement that they would consider in July modifying the freight transportation, and that this meeting would be held in Milwaukee, Wis., and that the National Association ought to take some action on it. Nobody had any authority to do anything, but the day for the meeting came, and I took the responsibility upon myself, and went to Milwaukee. The G. B. Lewis people were generous enough to make one of these carrier-crates with straw underneath and handle ends. With their representative we were fortunate enough in drawing lots to get an early opportunity to go before the Classification Committee, and we plead as best we could, I, for one, favoring the raising of the freight-rate on single case of comb honey, first-class; I think when a man is shipping only one, or two cases of comb honey, he ought not to be considered a shipper.

The classification would not apply to only one size case, but it does ask that we shall have a carrier-crate for the cases, with straw or hay or some excelsior, or something, underneath, and in that way you can ship your honey hereafter as second-class freight. This committee will meet in Texas in the winter.

Mr. Muth—I want to relate an experience of a shipment from Illinois last summer. A shipper sent me, I believe, 30 cases of comb honey. My driver brought them from the railroad; he had signed for them O. K., and when he came down to our store we opened them up, and everything was mashed and smashed. My man says, "I didn't see any breakage." "Great Caesar," says I, "and you O. K.'d them." Well, the railroad company knows we are square, and I called down my friend from the railroad company immediately, telling him my man had signed for the goods O. K. We got the claim for the honey, but they should not have paid it. The bee-man thought I was a scoundrel, and all this for not paying for that honey as I agreed to; but I think they should have lost all of that, and the railroad company ought not to have had to stand any of it.

Pres. York—He shipped you "bulk honey!"

Mr. Muth — I should say "hashed honey."

Mr. Wilcox—If there is nothing further, I move that we adjourn.

Pres. York—Just a few words before we go. I hope when you go home, and have an opportunity to vote on the new Constitution, that you will approve it. I have been going to conventions for something like 25 years. I remember, something like ten or fifteen years ago, working out a scheme for the affiliation of the National Association, spending a great deal of time on it, but it didn't pass. Finally, today we have begun to adopt a Constitution that contemplates affiliating societies; I would like to see it approved and tried. I believe it is the beginning of a new era for this Association, and perhaps for the bee-keepers of this country. I am sure any of us who have anything

to do with it will feel repaid for the time we have spent in trying to get something that the bee-keepers of this country need.

If there is anything further I can do, or if the officers and directors can do anything further, we will try to do it. We don't ask anything in the way of positions, but just give us a chance to help you, and the bee papers, I am sure, will all help this thing along. Let us see if we cannot introduce something along the line of co-operation that will amount to something. Let us work along the educational line as well.

I thank you for your interest and attention; it has been a great help to me in presiding over this meeting, and I know that we will continue to enjoy the rest of the time we are permitted to spend in Minneapolis.

At 9:30 p. m., the Convention adjourned to meet at the call of the Executive Committee or Board of Directors.

LIST OF MEMBERS

—OF THE—

Illinois State Bee-Keepers' Association

FOR 1912,
and Statistical Report for 1911.

(Where no State is given "Illinois" is understood.)

NAME AND ADDRESS.	How Many Colonies?	Comb Honey in 1911.....	Extracted Honey in 1911.....	Is There Foul Brood in Your County?...
Ahlers, H. C.—West Bend, Wis.....	.....	.....	.....	.....
Anthony, A. B.—Sterling, Ill.....	90	.....	.....	Yes
Arnd, H. M.—191 Superior St., Chicago, Ill.....	.....	.....	.....	.....
Arnold, F. X.—Deer Plain, Ill.....	.....	.....	.....	.....
Ash, J. W.—Hamilton, Ill.....	.....	.....	.....	.....
Augenstein, A. A.—R. 1, Dakota, Ill.....	.....	.....	.....	.....
Baldridge, M. M.—St. Charles, Ill.....	.....	.....	.....	.....
Balduff, Henry—Beardstown, Ill. ....	.....	.....	.....	.....
Bamberger, John—Freeport, Ill.....	.....	.....	.....	.....
Barkemeyer, B. D.—302 Chi. Ave., Oak Park, Ill..	.....	.....	.....	.....
Barr, C. W.—Gardner, Ill.....	60	500	200	Yes
Baxter, E. J.—Nauvoo, Ill.....	.....	.....	.....	.....
Becker, Chas.—Pleasant Plains, Ill.....	.....	.....	.....	.....
Benecke, Rev. W. F.—Dieterick, Ill.....	17	Failure	.....	No
Beidler, W. H.—R. 3, Freeport, Ill.....	.....	.....	.....	.....
Benson, August—R. 2, Prophetstown, Ill.....	100	50	50	Yes
Bishop, Frank—Virden, Ill.....	74	Failure	.....	.....
Bishop, W. W.—Virginia, Ill.....	6	220	.....	Yes
Blocher, D. J.—Pearl City, Ill.....	.....	.....	.....	.....
Blume, W. B.—Norwood Park Sta, Chicago, Ill..	49	1250	.....	.....
Bodenschatz, Adam—Lemont, Ill.	300	None	None	Yes
Borner, E. H.—R. 1, Pecatonica, Ill.....	.....	.....	.....	.....
Bowen, J. W.—Jacksonville, Ill.....	.....	.....	.....	.....
Boyd, C. J.—Anna, Ill.....	40	48	None	Yes
Brelsford, W. H.—Kenney, Ill.....	12	400	.....	.....
Bronell, L. F.—Plano, Ill.....	6	.....	.....	Yes
Brown, E. W.—Willow Springs, Ill.....	.....	.....	.....	.....
Brubaker, W. H.—R. 3, Freeport, Ill.....	.....	.....	.....	.....
Brullette, J. B.—St. Anne, Ill.....	.....	.....	.....	.....
Bruner, E. H.—3836 N. 44th Ave., Chicago, Ill...	.....	.....	.....	.....
Buckmayer, J. F.—Iowa City, Iowa.....	.....	.....	.....	.....
Bull, John C.—Valparaiso, Ind.....	.....	.....	.....	.....
Burnett, R. A.—199 S. Water St., Chicago, Ill...	.....	.....	.....	.....
Burtis, Eugene—Grover, Pa. ....	.....	.....	.....	.....
Candler, Miss Mathilda—Cassville, Wis.....	.....	.....	.....	.....

NAME AND ADDRESS.	How Many Colonies?	Comb Honey in 1911.....	Extracted Honey in 1911.....	Is There Foul Brood In Your County?...
Carrico, Jno. G.—Barnett, Ill.....	24	300	....	Yes
Caumford, C. J.—R. 1, Winnebago, Ill.....	....	....	....	....
Clark, Frank—Ridott, Ill. ....	....	....	....	....
Clawson, W. A.—R. 2, Assumption, Ill.....	22	1000	....	....
Cooke, A. N., & Son—Woodhull, Ill.....	50	Not a section..	....	Yes
Conrad, C. M—Flanagan, Ill.....	....	....	....	....
Coppin, Aaron—Wenona, Ill. ....	....	....	....	....
Cox, Wm.—Oakland, Ill.	50	500	....	....
Craven, Thomas—Seneca, Ill.	32	....	500	....
Crotzer, A. S.—Lena, Ill.....	41	400	....	....
Dadant, C. P.—Hamilton, Ill.....	....	....	....	....
Dadant, H. C.—Hamilton, Ill.....	....	....	....	....
Dadant, L. C.—Hamilton, Ill.....	....	....	....	....
Dadant, M. G.—Hamilton, Ill.....	....	....	....	....
Dailey, Wm.—R. 3, Woodstock, Ill.....	33	500	....	....
Deem, B. L.—Colona, Ill.....	24	....	....	....
Diebold, A. J.—Seneca, Ill.....	46	60	1150	....
Dittmer, Gus.—Augusta, Wis. ....	....	....	....	....
Donges, G. F.—Durand, Ill.....	75	50	2500	Yes
Downey, Elmer E.—Putnam, Ill.....	....	....	....	....
Drorak, John, Jr.—Algonquin, Ill.....	22	1100	120	No
Duby, H. S.—R. 4, St. Anne, Ill.....	Failure	....	....	Yes
Duff, Peter N.—1749 W. 58th St., Chicago, Ill...	....	....	....	....
Dustman, Chas. E.—Des Moines, Iowa.....	....	....	....	....
Eidmann, E. C.—119 S. Ill. St., Belleville, Ill.....	....	....	....	....
Einhaus, John—Seneca, Ill.	97	1400	2400	....
Enigenburg, John—Oakglen, Ill.	50	700	2100	Yes
Evans, J. M.—Auburn, Ill. ....	....	....	....	....
Falconer, W. W.—300 N. 48th Ave., Chicago, Ill.	....	....	....	....
Finger, C. A.—Marissa, Ill.	20	120	850	....
Finkenbinder, D. A.—Stockton, Ill.....	30	....	....	....
Fischer, Henry F.—Bensonville, Ill.....	50	225	....	....
Foltz, Adam C.—Elpaso, Ill.	14	100	....	....
Fosse, E. P.—Marion, Ill.	54	2000	2700	....
Frank, J. C.—R. 1, Davis, Ill.....	200	....	4000	....
Frank, John C.—Dodge City, Kans.	85	....	300	Yes
Frisch, John—Cor. Irving Park Blvd. and 56th Ave., Irving Park Station, Chicago, Ill.....	....	....	....	....
Funk, H. W.—Normal, Ill.	100	No crop	....	Yes
Geissaz, Alfred—Greenville, Ill.	104	2400	4500	Yes
Gilbert, G. B.—505 E. Boston Av., Monmouth, Ill.	....	....	....	....
Glasser, Wm.—Dakota, Ill. ....	....	....	....	....
Glenn, C. J.—Geneseo, Ill.....	....	....	....	....
Glessner, Mrs. J. J.—1800 Prairie Ave, Chicago.	....	....	....	....
Gortschler, Ben—Ellston, Iowa ....	....	....	....	....
Grabbe, F.—Libertyville, Ill. ....	....	....	....	....
Grant, W. W.—Marion, Ill.....	15	55	140	....
Gray, W. H.—Chillicothe, Ill.....	112	100	1000	Yes
Greer, J. R.—Shumway, Ill.....	18	1000	40	....
Group, John F.—Franklin Grove, Ill.....	15	100	....	Yes
Gulliford, G. L.—Bloomington, Ill.....	28	25	100	Yes
Gundy, W. C.—Ritchey, Ill.	5	60	....	....
Hansel, Charlie—Minooka, Ill.	20	300	120	....

NAME AND ADDRESS.	How Many Colonies?	Comb Honey in 1911.	Extracted Honey in 1911.	Is There Foul Brood In Your County?...
Hansel, Will—Box 14, Minooka, Ill.	29	408	101	....
Hartman, Fred E.—R. 2, Troy, Ill.	6	135	....	....
Hastings, Chas.—1625 N. Union St., Decatur, Ill. ....	....	....	....	....
Heinold, Fred—Cissan Park, Ill.	15	200	200	No
Heinze, Herman—R. 1, Moro, Ill. ....	....	....	....	....
Heinzel, Albert O.—Lincoln, Ill. ....	....	....	....	....
Heise, Paul—L. Box 444, Warsaw, Ill.	20	300	100	....
Heslop, Edward—R. 8, Springfield, Ill.	11	....	....	....
Hight, Leroy, Cornell, Ill. ....	....	....	....	....
Hill, H. D.—Lima, Ill.	160	Light crop	....	....
Hinderer, Frank—Frederick, Ill.	27	2200	....	Yes
Hitch, Rev. H. F.—R. 1, Harrisburg, Ill.	20	1500	400	No
Hitt, Samuel H.—Elizabeth, Ill.	130	300	2000	....
Hohner, Peter—R. 1, Henry, Ill. ....	....	....	....	....
Holmes, Miss H. C.—Belle Rive, Ill.	14	525	175	....
Homan, W. A.—703 N. 12th St., Quincy, Ill.	65	2000	200	....
Horstman, Wm. H.—6759 Morgan, Chicago.	16	100	750	Yes
Howland, Harry D.—Gardner, Ill.	10	500	....	Yes
Huffman, Jacob—Monroe, Wis. ....	....	....	....	....
Hutt, Jos. G.—1710 S. Wash. St., Peoria, Ill.	36	2400	....	Yes
Hyde, Geo. S.—New Canton, Ill. ....	....	....	....	Yes
Hyde, W. H.—New Canton, Ill. ....	....	....	....	Yes
Jansen, Wm. F.—R. 8, Quincy, Ill. ....	....	....	....	....
Johnson, M. D.—Webster, Iowa. ....	....	....	....	....
Jones, Geo. W.—West Bend, Wis. ....	....	....	....	....
Josephson, Mrs. Aug.—Box 121, Granville, Ill.	30	500	500	Yes
Kaler, Sylvester,—Smithfield, Ill. ....	....	....	....	....
Kendall, J. S.—Chemung, Ill.	20	300	100	Yes
Kenneberg, C. F.—416 Marion St., Oak Park, Ill. ....	....	....	....	....
Kennedy, Miss L. C.—R. 11, Curran, Ill.	60	200	....	Yes
Kennedy, B.—Cherry Valley, Ill. ....	....	....	....	....
Kerley, Josiah—Anna Hospital, Southern Ill. ....	....	....	....	....
Kildow, A. L.—Putnam, Ill. ....	....	....	....	....
Kile, Henry—Mason City, Ill.	50	300	200	Yes
King, Chris C.—Savanna, Ill.	30	Failure	....	....
Kluck, N. A.—Lena, Ill. ....	....	....	....	....
Kneser, John—Barrington, Ill. ....	....	....	....	....
Kuczynski, John F.—Box 114, Oglesby, Ill. ....	....	500	200	Yes
Laxton, J. G.—Lyndon, Ill.	120	None	None	Yes
Lee, Arthur—Rockton, Ill. ....	....	....	....	....
Lee, H. W.—Pecatonica, Ill. ....	....	....	....	....
Legat, Sylvester—R. 1, Spring Valley, Ill. ....	....	....	....	....
Lind, M. H.—Baders, Ill.	115	700	1400	Yes
Longwell, B. R.—1115 1st Ave., Rochelle, Ill. ....	....	....	....	....
Lovell, W. C.—Sycamore, Ill.	20	300	....	....
Ludwig, H. M.—Collinsville, Ill. ....	....	....	....	....
Lyman, W. C.—Downers Grove, Ill. ....	....	....	....	....
Lynard, M. M.—Auburn, Ill. ....	....	....	....	....
Mackie, J. M.—Liberty, Ill. ....	....	....	....	....
Magee, Geo. T.—Cairo, Ill.	30	100	30	No
Marshall, Wm. Carpenterville, Ill.	18	40	....	....
Maschger, W. C.—Iola, Ill.	10	....	240	Yes
May, Fred H.—P. O. Box 34, Meredosia, Ill.	87	210	1800	....

NAME AND ADDRESS.

NAME AND ADDRESS.	How Many Colonies?	Comb Honey in 1911.	Extracted Honey in 1911.	Is There Foul Brood In Your County?
Meise, F. A.—Coatsburg, Ill.	75	None	None	....
Michell, Philip A.—Forkland, Ala.	....	....	....	....
Miller, Dr. C. C.—Marengo, Ill.	100	....	....	Yes
Miller, W. C.—Box R., Ottawa, Ill.	100	1800	....	....
Moore, W. B.—Altona, Ill.	....	....	....	....
Muchleip, H.—Apple River, Ill.	65	....	....	No
Ness, L. L.—Morris, Ill.	200	5000	....	Yes
Niblack, M. J.—Vincennes, Ind.	....	....	....	....
Norberg, Peter J.—Spring Valley, Ill.	170	....	....	Yes
Null, William D.—Demopolis, Ala.	....	....	....	....
Nydegger, John—801 W. Voorhees St., Danville	80	....	....	Yes
Oakes, Lannes P.—Joppa, Ill.	35	1400	....	....
O'Donnell, Leo—1345 Jackson St. Rockford, Ill.	3	....	....	No
Offner, Fred—Monee, Ill.	....	....	....	....
Opfer, A. H.—2650 Patterson Ave., Dunning Sta., Chicago, Ill.	....	....	....	....
Ostermeier, John—Mechanicsburg, Ill.	12	Small amount	....	Yes
Payne, Jno. W.—R. 1, Georgetown, Ill.	19	Total failure	....	No
Peterson, C. B.—6959 Union Ave., Chicago	....	....	....	....
Piper, G. M.—Chillicothe, Ill.	108	Very little	....	Yes
Pippenger, M. A.—Lincoln, Ill.	....	....	....	....
Poindexter, Jas.—R. 5, Bloomington, Ill.	....	....	....	....
Potstock, H. A.—5427 Milwaukee Ave., Chicago	....	....	....	....
Pressler, E. W.—1726 Armitage Ave., Chicago	....	....	....	....
Pritchard, Charlie—Grand Rapids, Wis.	....	....	....	....
Pyles, I. E.—Putnam, Ill.	....	....	....	....
Ranschenberg, Wm.—5812 Lawrence Ave., Jefferson Sta., Chicago	24	250	300	....
Rehnstrom, Stephen—Andover, Ill.	21	Failure	....	....
Reynolds, Alvah—Altona, Ill. (Life Member)	....	....	....	....
Reynolds, W. G.—1956 Ogden Ave., Chicago	....	....	....	....
Riley, W.—Breeds, Ill.	....	....	....	....
Robbins, Daniel E.—Payson, Ill.	36	....	600	....
Roberts, Jesse H.—Watseka, Ill.	....	....	....	....
Roberts, Thos. D.—Herscher, Ill.	18	425	....	....
Rogers, H. D.—Lewistown, Ill.	....	....	....	....
Rohkaster, Herman, Fruit, Ill.	....	....	....	....
Rolf, William—Hoyleton, Ill.	9	50	550	....
Ross, R. B., Jr.—412 Corestine Bldg., Montreal, Canada	....	....	....	....
Russow, Gottlieb—1584 N. Leavitt St., Chicago	5	....	....	....
Sauer, John—R. 5, Springfield, Ill.	....	....	....	....
Scaggs, Oliver—Putnam, Ill.	....	....	....	....
Schaar, Wm.—R. 3, Joliet, Ill.	20	400	None	Yes
Schmertman, Louis—R. 1, Freeport, Ill.	30	635	....	Yes
Schroll, Julius—4922 Medill Ave., Chicago	....	....	....	....
Seastream, George—Box 142, Pawnee, Ill.	....	....	....	....
Secor, Eugene—P. M., Forest City, Iowa	....	....	....	....
Secor, W. G.—Greenfield, Ill.	....	....	....	....
Seeley, John W.—Toledo, Ill.	12	....	....	No
Seibold, Jacob—Homer, Ill.	....	....	....	....
Sells, L. M.—R. F. D., Walnut, Ill.	4	None	None	Yes
Settle, W. H.—Gridley, Ill.	60	None	None	....

NAME AND ADDRESS.	How Many Colonies?	Comb Honey in 1911.....	Extracted Honey in 1911.....	Is There Foul Brood In Your County?....
Shaw, Duane—Palestine, Ill.	90	3500	....	Yes
Shawver, Oscar—Casey, Ill.	44	400	....	....
Sherrill, Burt L.—Pittwood, Ill.	50	500	300	Yes
Shrontz, Mack—Momence, Ill. ....	....	....	....	....
Shupe, Frank—Mazon, Ill.	55	1000	500	....
Simmons, J. R.—Harvey, Ill.	22	200	600	....
Simpson, W.—Meyer, Ill. ....	....	....	....	....
Slack, Geo. B.—Mapleton, Ill. ....	....	....	....	....
Smith, C. O.—5533 Cornell Ave., Chicago, Ill. ....	....	....	....	....
Smith, E. F.—Chadwick, Ill.	14	....	....	Yes
Smith, Walter E.—Lincoln, Ill. ....	....	....	....	....
Snell, F. A.—Milledgeville, Ill.	80	....	1500	Yes
Stanley, Arthur—Dixon, Ill. ....	....	....	....	....
Stockdale, Dr. F. A.—Coal City, Ill. ....	....	....	....	....
Stone, Jas. A.—R. 4, Springfield, Ill. ....	....	....	....	....
Stombraker, J. S.—Walnut, Ill. ....	....	....	....	....
Sulzberger, Harry M.—Ransom, Ill.	48	2100	....	Yes
Tobias, Engle—Freeport, Ill. ....	....	....	....	....
Trickey, H.—Reno, Nevada ....	....	....	....	....
Truby, S. K.—Maple Park, Ill. ....	....	....	....	....
Turner, W. P.—Peoria Heights, Ill.	80	....	....	....
Ulrich, G. E.—Campus, Ill.	7	100	....	Yes
VanButsele, Louis—R. 1, Collinsville, Ill.	27	250	400	....
Van DeWiel, Anton—E. Dubuque, Ill.	10	....	....	....
Vaughn, B. O.—Box 35, Auburn, Ill.	25	....	....	Yes
Vawter, F. E.—Box 165, Industry, Ill.	15	....	....	....
Vernon, George—Carlyle, Ill. ....	....	....	....	....
Vogel, Henry—Galena, Ill.	35	600	100	No
Voorhees, Abe—Oglesby, LaSalle Co., Ill. ....	....	....	....	....
Wagner, L. E.—Readstown, Wis. ....	....	....	....	....
Walker, Albert—Petersburg, Ill.	10	No surplus	....	Yes
Watts, C. S.—Monticello, Ill.	50	....	200	Yes
Weckerle, Mrs. Anna—12345 Wallace St., W. Pullman, Ill.	18	....	980	....
Werner, Louis—Edwardsville, Ill. ....	....	....	....	....
Weston, Miss Georgia M.—Geneva, Ill. ....	....	....	....	....
Wheeler, J. C.—Oak Park, Ill. ....	....	....	....	....
Whitmore, Dr. N. P.—Gardner, Grundy Co., Ill.	13	....	....	Yes
Whitmore, H.—Box 551, Momence, Ill.	32	350	200	Yes
Wicklein, F. A.—Percy, Ill.	15	....	750	....
Widicus, Daniel—St. Jacob, Ill.	15	....	500	Yes
Wilkie, J. D.—R. 2, Chi. Heights, Ill.	15	40	....	....
Williams, Jesse E.—Wheelerville, Pa. ....	....	....	....	....
Wilson, Miss Emma—Marengo, Ill. ....	....	....	....	....
Withrow, G. M.—Buffalo, Ill. ....	....	....	....	....
Woodman, A. G.—Grand Rapids, Mich. ....	....	....	....	....
Woolsey, Geo. A.—623 Jefferson St., Rockford..	50	450	200	Yes
Wrightman, Henry—Auburn, Ill. ....	....	....	....	....
York, Geo. W.—117 N. Jefferson St., Chicago....	....	....	....	....
Zeller, Mrs. Caroline—R. 35, Peoria, Ill.	19	250	50	....
Zimmerman, Henry—Bethalto, Ill. ....	....	....	....	....

INDEX TO ELEVENTH ANNUAL REPORT.

	Page.		Page.
Address of Welcome by the Mayor of Milwaukee	129	Chicago Northwestern—Afternoon Session, First Day	83
Anatomical Bee Models and Lec- tures	68	Chicago Northwestern—Afternoon Session, Second Day	117
Annual Address of the President of National	165	Chicago Northwestern—Morning Session, Second Day	106
Annual Meeting—Date of.....	59	Chicago Northwestern—Proceed- ings of the	73
Anti Spraying Law	82	Chicago Northwestern—Report of Committee on Resolutions.....	119
Apiary Inspection—Methods of— By Geo. S. Demuth.....	150	Chicago Northwestern—Time of Holding Annual Meeting	127
Appropriation Bill	13	Colorado Honey Producers' Associ- ation—What it is Doing.....	198
Auditing Committee—Reports of 52, 69		Color of Honey—Change in.....	102
Baxter, E. J.—Resolution by.....	69	Comb and Extracted Honey—Pro- ducing	60
Baxter, E. J.—The Honey Bee and the Average Horticulturist.....	117	Comb Honey—Local Shipments of	209
Bee Disease Legislation.....	166	Comb Honey—Uniform Shipping Cases for	191
Bee Escape for Removing Honey..	120	Committees—Appointment of	28
Bee Keeper—Oldest.. ..	89	Committees in the National As- sociation	154
Bee Keepers Buying Honey to Re- tail	100	Constitution Ill. State Bee Keep- ers' Association	9
Bee Keepers—Co-operation Among	198	Contagion—Causes of	17
Bee Keepers—Letter to.....	26	Co-Operation Among Bee Keepers	198
Bee Keeping at the State Uni- versity	69	Co-Operation—National Associa- tion and	202
Bees at State Fair—Premium for Manipulating them	49	Co-Operation—Obstacles to (Jas. K. Hedstrom)	207
Bees Dying Outside the Hives— Cause of	113	Dadant, C. P.—Do We Need Other State Laws for Bee Keepers?... ..	110
Bees—Heavy Mortality in.....	100	Dadant, L. C.—Marketing Honey— From the Producers' Stand Point	61
Bees in Trees—Foul Brood and...	164	Dadant, L. C.—Picture of	74
Bees—Paralysis in	114	Discussion	57
Beeswax Cakes—Black Substance at Bottom of	105	Dividends and Rebates—(Frank Rauchfus)	200
Beeswax—Testing for Purity	104	Double Tier Cases—Specifications for	192
Black Brood—Treatment of.....	22	Dr. Leonard's Foul Brood Treat- ment	153
Blocher, D. J.—Should Honey Pro- ducers Try to Rear Queens?....	106	Drones—Heat Produced By.....	89
Brood Diseases—Campaign Against (By Dr. E. F. Phillips).....	132	Drones—To Keep the Brood Warm	29
Bulletins—National Association ..	175	Duff's Old Queen Bee.....	127
Buying Honey to Sell Again.....	65	Dysentery—Causes—Treatment ...	22
By-Laws of the State Association.	9	Election of Delegates to the Na- tional	92
Caucasian Bees—What I think of Them (A. D. D. Wood).....	97		
Charter of Illinois State Bee-Keep- ers' Association	8		
Charter Members of Ill. State Bee- Keepers' Association	7		
Chicago Northwestern—Adjourn- ment of	127		

	Page.		Page.
Election of Officers—Chicago		Illinois State Association—Forma-	
Northwestern	92	tion of	7
Election of Officers—Illinois State.	64	Illinois State Association—Morning	
European Foul Brood	93	Session, Second Day	59
Experiments	18	Illinois State Association—Officers	
Extracted Honey—Premiums on		for 1912	5
Samples of	51	Illinois State Association—Picture	
Extracted Honey—Standard Can		of Members Present	72
for	196	Illinois State Association—Pro-	
Extracting Frames—Shallow	117	ceedings Twenty-first Annual	
		Session	23
Facey, Mr.—Letter from	176	Illinois State University—Bee	
Financial Report of Secretary....	29	Keeping at	69
Foul Brood	35	Italian Bees—Hybrid vs. Leather	
Foul Brood and Bees in Trees....	164	Colored	108
Foul Brood and Other Diseases of			
Bees	16	Langstroth's Picture	4
Foul Brood—Curing	150	Laws—State—Passing of	80
Foul Brood—Dr. Miller—Talk on..	83	Letter of Transmittal	3
Foul Brood—European	93	Local Market—Developing a.....	160
Foul Brood—McEvoy Treatment ..	19		
Foul Brood—Symptoms of	18	Mail Order Honey Trade.....	159
Foul Brood—Treatment of	19	Marketing Honey—From the Pro-	
Foul Broody Colonies—Honey from	70	ducers' Stand Point—L. C.	
France, Hon. N. E.—Picture of....	128	Dadant	62
Freight Rates and Breakage Claims	199	Mayor—Address of Welcome by..	129
Fruit Juice in the Hives.....	58	Minutes of Last Meeting (1910)...	24
Glass for Shipping Cases—Width		National Bee-Keepers' Association	
of	58	and Co-Operation	202
Government—The—And Bee Cul-		National Bee-Keepers' Association	
ture	166	—Annual Convention Report....	172
		National Bee-Keepers' Association	
Hedstrom, Jas. K.—Obstacles to		—Bulletins	175
Co-Operation	207	National Bee-Keepers' Association	
Hive—Ten Frames with Nine		—Committees in	154
Frames	108	National Bee-Keepers' Association	
Honey—Adulteration of	179	—Constitution of	180
Honey a Luxury—When is?.....	101	National Bee-Keepers' Association	
Honey Label—Wording for	102	—First Day, Evening Session... 154	
Honey—Prevent from Souring....	112	National Bee-Keepers' Association	
Honey Producers—Should they try		—Future of (Geo. W. York).....	166
to Rear Queens? By D. J. Blocher	106	National Bee-Keepers' Association	
Honey—Proof of Pure	103	—Helping to Grow	177
Honey—Ready Sale of.....	90	National Bee-Keepers' Association	
Honey Receptacles	92	—Next Place of Meeting.....	177
Honey—Rules for Grading.....	14	National Bee-Keepers' Association	
Honey Tank—A Sample.....	120	—Reference to	41
Honey Trade-Mark—National	99	National Bee-Keepers' Association	
Honey Vinegar—Making	115	—Report of	128
House to House Peddling.....	160	National Bee-Keepers' Association	
Hotel—The Great Northern.....	126	—Resolutions Adopted by.....	178
Hutchinson, W. Z.—Resolution on		National Bee-Keepers' Association	
Death of	126	—Rules of Order	188
		National Bee-Keepers' Association	
Illinois State Association—After-		—Second Day, Afternoon Session	180
noon Session, First Day	34	National Bee-Keepers' Association	
Illinois State Association—Consti-		—Second Day, Evening Session. 198	
tution	9	National Bee-Keepers' Association	
Illinois State Association—Evening		—Second Day, Morning Session. 165	
Session, First Day	52	National Bee-Keepers' Association	
		—Secretary's Report	171

	Page.		Page.
National Government—Its Relation to Foul Brood—By Wm. A. Selser	141	State Inspector's Report (A. L. Kildow)	53
Pickled Brood—Symptoms—Treat- ment	21	State Laws on Bee-Keeping—Do We Need Other? (C. P. Dadant)	110
Queen-Mating Stations	189	Stores—Display of	160
Rauchfus, Frank—Dividends and Rebates	200	Sweet Clover Area—Increasing it..	122
Resolution of Sympathy to T. F. Bingham	127	Sweet Clover Bloom—Yellow and White	121
Second Story Extracting Frames..	109	Texas and Other Southern Queens	107
Secretary's Report for 1911 (Illinois State Association)	25	Treasurer's Report. (Ill. State)....	27
Selser, Wm. A.—National Govern- ment—Foul Brood	141	Uncapping Knives—Steam Heated	109
Shipping Cases—Single or Double Tier?	33, 87	Uncapping Melters or Machines...	190
Shipping Cases—Width of Glass in	88	Utah	20
Size of Package for Retail Trade..	161	White Clover—Prospects for 1912.	58
Standard Sections	194	Wood, A. D. D.—What I Think of Caucasian Bees	97
State Inspector of Apiaries.....	11	Wright, V. P.—Letters From.....	129
		York, Geo. W.—Picture of	74
		York, Geo. W.—The Future of the National	166



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